

THE MILLING WORLD

AND

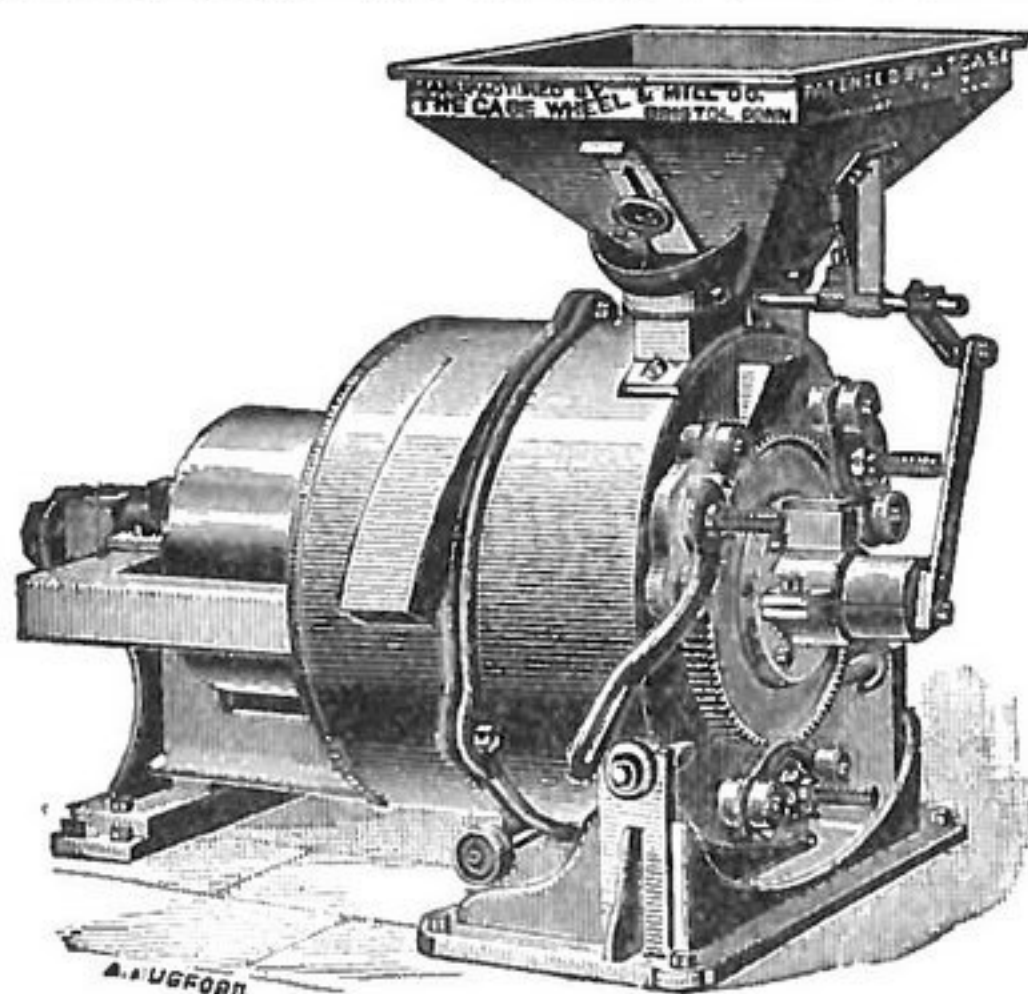
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 9.

BUFFALO, N. Y., OCTOBER 28, 1889.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

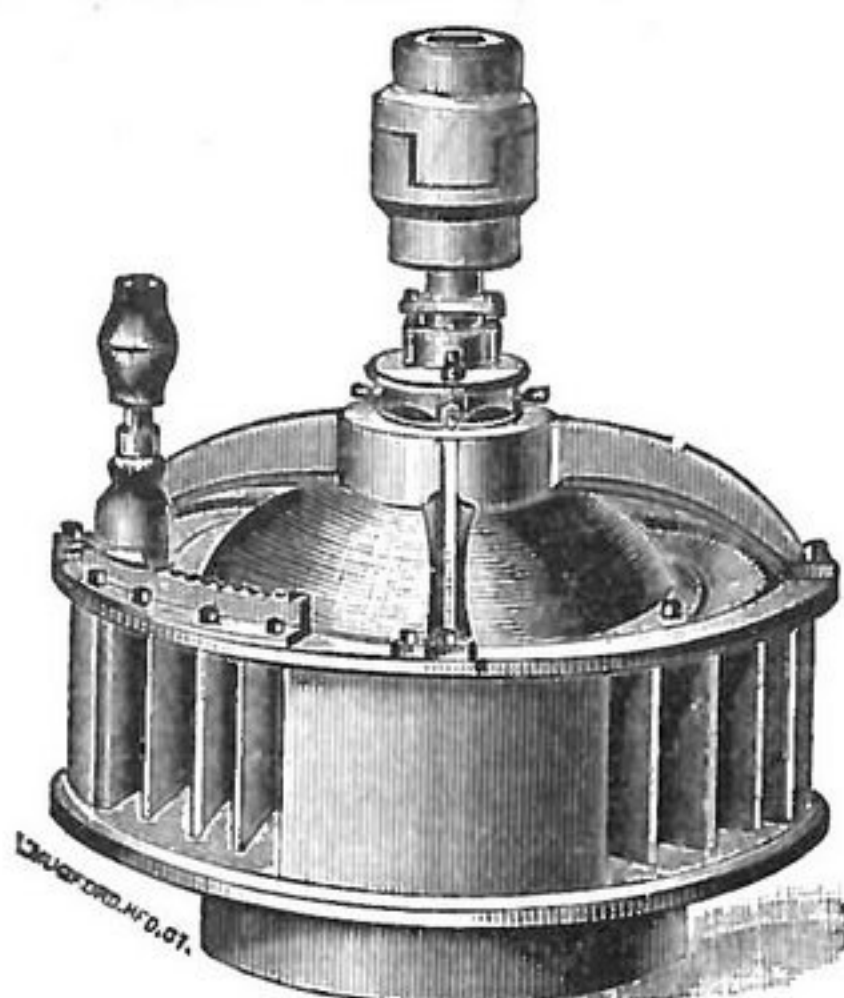
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"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.
 "Superior to any mill in use."—GEO. WESTON, Bristol, Conn.
 "The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.
 "We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.
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WE BUILD

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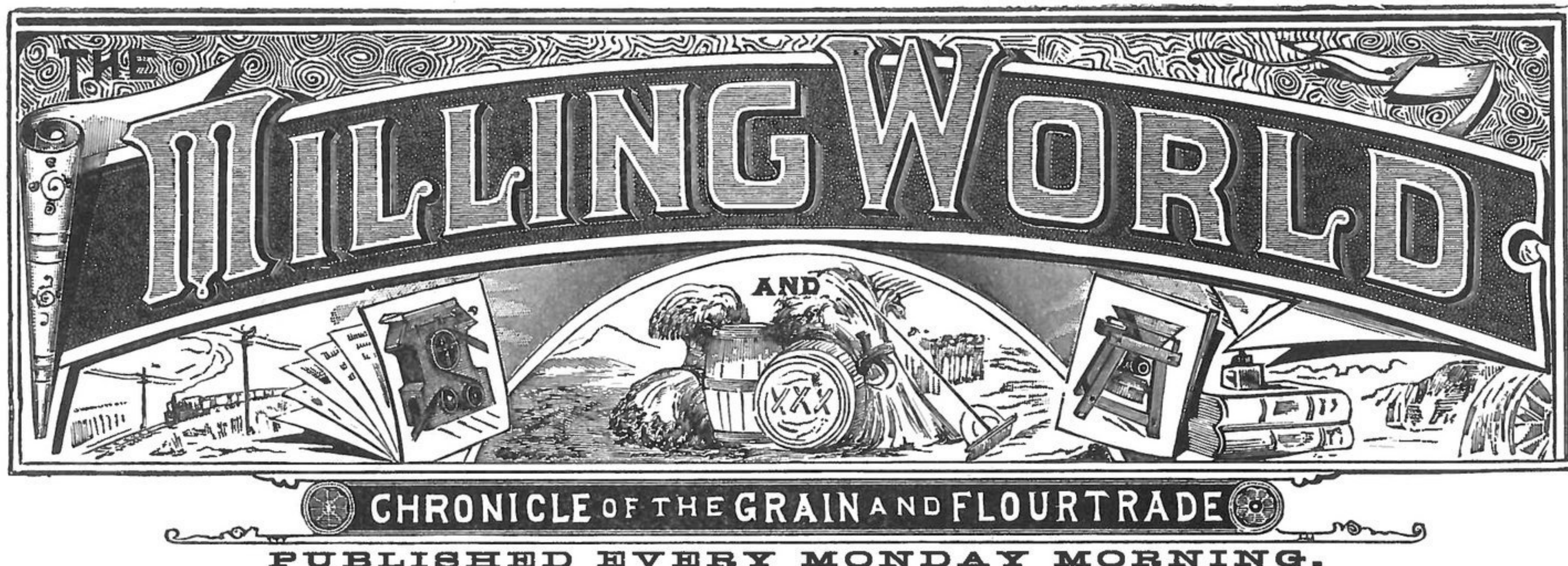
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CASE.

CASE MFG. CO., COLUMBUS, O.
GENTLEMEN: If we were to build a hundred mills we
would not permit any other than the "CASE" roll to
enter them. They are the best roll on earth.
Yours truly,
W. C. MANSFIELD & CO.

W. C. MANSFIELD & CO.,
MERCHANT MILLERS,
CLEVELAND, TENN., AUG. 29, 1889.

CASE.



VOL. XXI. No. 9.

BUFFALO, N. Y., OCTOBER 28, 1889.

\$1.50 PER YEAR.

ACCORDING to a statement made by the London, England, "Bankers' Magazine," the "338 leading Stock Exchange securities" handled in London have declined in value, since the first of June, \$225,000,000. Among the securities showing the greatest decrease are the British and Indian funds, British railway ordinary stocks and British railway preferences. With this statement by the magazine named is made another statement, showing that the securities whose values increased during the same time are foreign government bonds and American railroad bonds. Probably these statements explain the free movement of British funds into the United States in search for flouring-mills, grain-elevators, breweries and other establishments. The enormous decline in the value of British securities appears more singular at present in view of the "great business improvement" said to be prevailing in all parts of Great Britain.

EVERY day we hear it said, or read it in print, that "the statistical position of American wheat is very strong," and that "an advance in price is sure to come soon." At the same time and from the same orators and journals we learn that the government estimate of the American wheat crop of 1889 is 495,000,000 bushels, that one expert, who has been traveling over the wheat sections, estimates it at 535,000,000 bushels, and that a second expert, who is pronounced infallible and incorruptible, going over the same sections, has found a crop of 585,000,000 bushels. From the government figures we would have about 100,000,000 bushels of wheat, from the first expert's figures 140,000,000 bushels, and from the second expert's figures 190,000,000 bushels to export. In either case, with wheat from the Southern Hemisphere, where the prospects are now good for a large crop, to arrive in Europe in February and March, it is not easy to see the exceeding strength in the statistical position. If the estimates quoted are reasonable, the statistical position is not strong. If the statistical position is strong, the estimates given are all wrong. To the man up a tree the situation is perplexing. It is not definitely settled whether Europe needs to import 100,000,000 or 250,000,000 bushels of wheat. It is not settled whether the United States can export 100,000,000 or 200,000,000 bushels of wheat. How can such indefiniteness impart strength to the statistical position?

THE September report of breadstuff exportations did not reveal much change. The September wheat exports were 3,945,508 bushels, worth \$3,250,913, against 6,532,156 bushels, worth \$5,992,795, in September, 1888. For the three months ended September 30 this year the wheat exports were 14,021,936 bushels, worth \$11,847,011, against 17,114,923 bushels, worth \$15,445,995, last year. The September exports of flour this year were 859,075 barrels, worth \$4,141,458, against 956,393 barrels, worth \$4,490,357, last year. For the three months ended September 30 this year the flour exports were 2,717,608 barrels, worth \$13,070,582, against 2,641,774 barrels, worth \$12,025,144, last year. The value of the wheat grain and flour exports during the first three months of the current fiscal year is \$24,917,593, against \$27,471,139 for the corresponding months last year. In the other lines the

September showing is as follows: Barley \$160,911, against \$36,780; corn 4,910,152 bushels, worth \$2,065,485, against 3,985,542 bushels, worth \$2,108,487; corn-meal \$57,469, against \$66,764; oats \$127,243, against \$33,980; oatmeal \$14,785, against \$5,296; rye \$56,524, against \$23,710. The total breadstuff exportation in September this year was \$9,874,788, against \$12,758,169 last year; for the three months ended September 30 this year the total was \$33,044,509, against \$32,769,347 last year; for the nine months ending September 30 this year the total was \$90,274,218, against \$83,261,293 a year ago. The slow movement of wheat and wheat flour is somewhat disappointing, and its explanation lies in the fact that the shortage in European wheat crops has not proved to be so large as predicted, while the American wheat crop is probably far larger than it was at first estimated to be, these two conditions making European importing countries free from fear of want.

CANADIAN crop reports promise to become quite as ridiculous in the estimation of well-informed persons as the reports of any other country on earth. Gross exaggeration and senseless misrepresentation appear to be the main characteristics of these reports, but time brings out their falsity plainly and reveals the true state of affairs. According to the recent statements of some Canadian journals the season of 1889 was one of abundant crops all around in the Dominion. The wheat crop was 35,000,000 bushels, the barley crop was the finest and largest ever grown, the oats crop was immense in quantity and supreme in quality, and fruits and vegetables were abundant and excellent. These reports were intended for circulation in Great Britain, to make intending emigrants think that Canada is a land of promise and plenty. But the reports that are circulating in Canada, intended for home consumption, can not conceal the truth. These reports, coming from "straight" sources, show the reverse side of the rose-colored picture sent abroad. The truth seems to be that the Canadian wheat crop is short and bad. The boomers claim that Manitoba has a wheat surplus of 12,000,000 to 14,000,000 bushels. The Winnipeg "Commercial" says the surplus may reach 5,000,000 bushels. The Ontario wheat crop is short and bad, 8,500,000 bushels below the average crop and so poor in quality that the Ontario millers find it necessary to import good wheat. The Quebec wheat crop appears to be a "disastrous failure." In that Province two parishes, Sainte Martine and Saint Louis, which last year exported 100,000 bushels of wheat, will this year need to import wheat for seed. In fruits throughout the Dominion there is a poor crop, the poorest for years. The oats crop is below the average. The barley crop is short, poor, stained and inferior generally. The pea crop, important in some parts of the Dominion, is a bad failure. And so it goes. Does Canada gain or lose, on the whole, by sending out a falsely bright picture of a truly dark condition of agricultural affairs within her borders? Suppose immigrants are attracted to Canada by the false picture, how long will it take them to find out that they are deceived? Having discovered the deception, how long will they remain in Canada? All crop-lying is wrong, wherever and by whomsoever perpetrated.

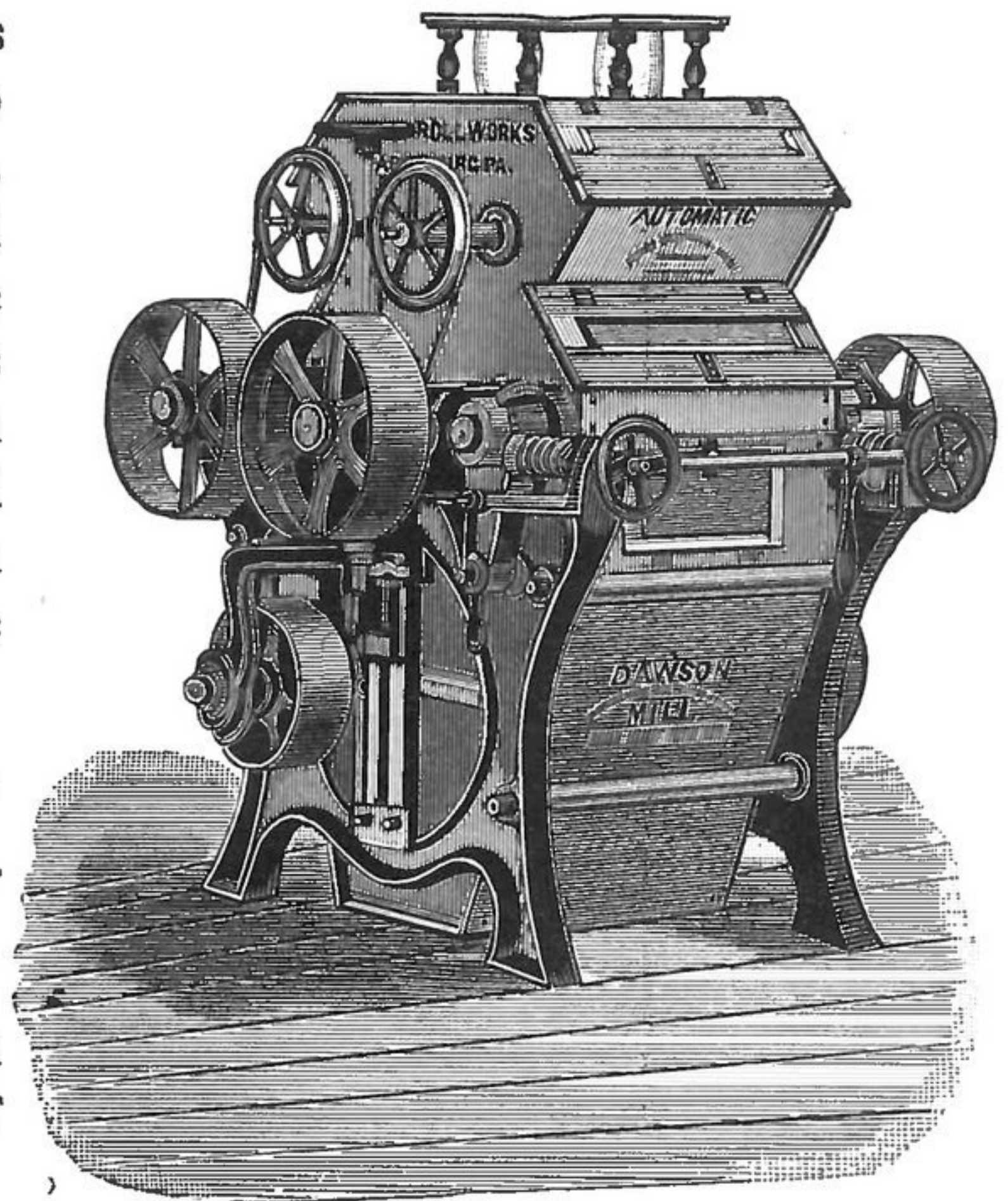
Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

We have a large plant to Re-grind and Re-Corrugate Rolls.

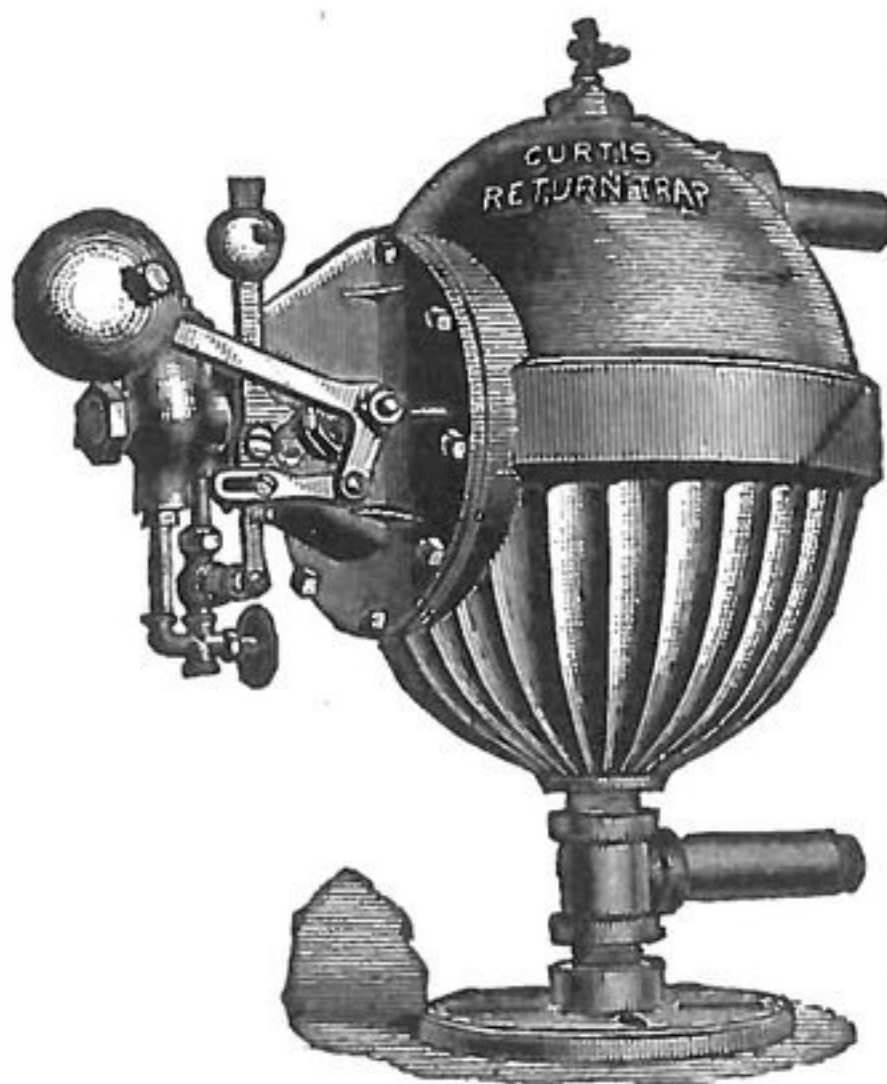
Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.



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Dawson Roll Works, Harrisburg, Pa.



THE CURTIS PATENT RETURN STEAM TRAP.

It is noiseless, positive, rapid, will return all condensation back into the boiler, and works equally well in connection with reduced pressure or exhaust steam, also when the return is below the water line of the boiler.

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The Canton Cabinet Filing Case Company, Canton, Ohio.

MANUFACTURERS OF

The New Buckeye Document Case & Letter File; Also All Kinds Office Furniture



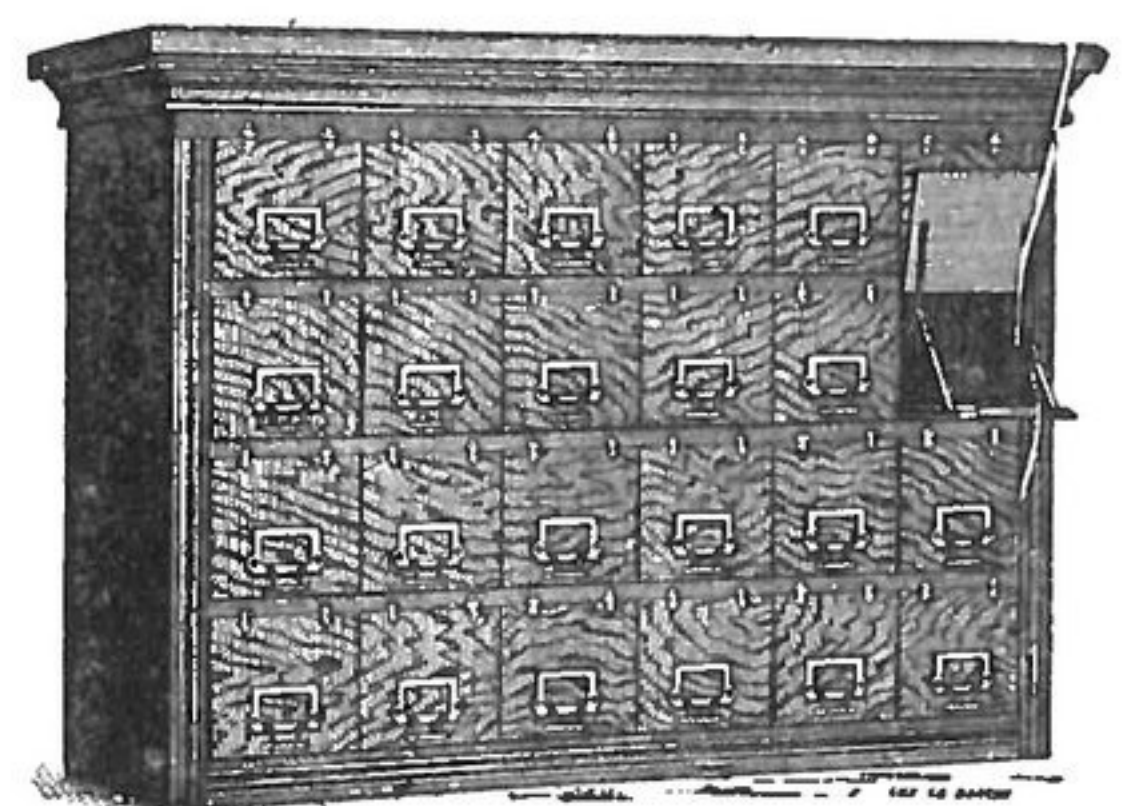
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NO. 8 Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 30 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

NO. 1 Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

Our Cabinet Files are Conceded to be the Most Convenient of Any in the Market. They are Compact, Simple, Complete, Durable and Ornamental.

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NO. 1.



PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Over Bank of Attica.
McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in un-registered letter at sender's risk.
To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.
Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisements taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

Western New York, Ohio and Pennsylvania mills in want of a temperate miller, with 20 years experience, should write to the undersigned, who is now running a first class mill, but would like to make a change this fall. Address, W., care of THE MILLING WORLD. 56

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

FOR RENT.

Water power grist mill. Three run stone, fair order. Good opportunity. Require but little capital. Apply to M. D. OLNEY, Irvine, Warren County, Pa. 69

SITUATION WANTED.

As miller, by an active young man, used to rolls and stones. Strong, willing and not afraid to work. Best of references. Address "E. N.," 109 East Eagle street, Buffalo, N. Y. 811

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

FLENNIKEN TURBINE CO.,
Dubuque, Iowa.

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

FOR RENT.

Clifton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 8tf

WANTED.

A miller who can purchase an interest. Business rapidly increasing. Must enlarge mill and add machinery. Only mill in this, Gray's Harbor, region. Good water-power. Address, REV. HIRAM F. WHITE, Elma, Chehalis County, Washington Territory. 710

GRIST MILL.

For sale or to rent, situated at South Plainfield, one eighth mile from Lehigh Valley R. R. Station. Two miles from Plainfield, N. J. Has an overshot wheel, with three run of stone, with necessary machinery, never-failing stream, considered the best in the State for its size. For suitable tenant may put in a roller system. Ice pond capable of furnishing 20,000 tons per annum. Apply to C. BRAKER, Jr., 215 Pearl Street, New York. 8

THE Consolidated Roller Mill Company evidently forgot the fate of the "Haggenmacher Plansichter," at Louvain, Belgium, when it tackled the George T. Smith Middlings Purifier Company. History repeats itself. There are roller-mills and roller-mills in this country. Moral: Don't monkey with the band-saw while it is in motion!

LAST week one very bold wheat bull was to the front with the somewhat startling statement that the wheat crop of the United States for 1889 is not more than 425,000,000 bushels. He qualified his assertion by saying that the crop could not go beyond that figure, if the reports of acreage and condition made last spring by the government statistician were reliable. This particular bull is piling up disappointment for himself. The government reports have at no time stated definitely the acreage sown to wheat in 1889, and of course the reports on condition have varied as the season progressed. Nothing sent out by statistician Dodge has justified the statement that the wheat crop is only 425,000,000 bushels. If the bull in question has the courage of his convictions, he should load up with wheat, load up from roof-peak to cellar-bottom, at the prices now prevailing.

MISREPRESENTATION is cheap in the eyes of those who propose to profit by falsehood, but it often overreaches itself. Here is the assistant president of the Canadian Pacific Railway, for instance, Mr. T. G. Shaughnessy, saying in an English newspaper: "We are also building some branches in the North-western territories, Manitoba, all of which will pay. The change which has come over the Northwest in a few years has been extraordinary. The entire quantity of grain shipped out there in 1882 was 400,000 bushels. This year we will haul out between ten and twelve millions of bushels. A great part of that grain is used in Canada, and considerable quantities come over here. Some in the form of flour is also shipped to Japan. Seven years ago an inhabitant could not be seen for miles and miles, and now they are grinding flour and shipping it to the East. That is one of the little things that impress you." This falsehood is approvingly quoted by our esteemed London cotemporary, the "Financial Times." It may be news to our cotemporary to learn that the most reliable authority in Manitoba estimate the possible surplus of wheat in that province to be 6,000,000 bushels, while the probable surplus will be about 4,000,000 bushels. One observer, who has "done" Manitoba since harvest, asserts that the entire exportable surplus of Manitoba and Assiniboia will be less than 3,000,000 bushels. The assistant president of the Canadian Pacific may not consider that truth "one of the little things that impress" the public. When he is cooking his reports to attract British investors, he should not inject too much imaginary Manitoba wheat into the kettle. British investors are very gullible, if one may judge from the readiness with which they accept invitation after invitation to Barmecide feasts. The Canadian Pacific is basing its hopes on the continuance of the present inequitable and outrageous restriction of American railroad business by fool-laws, and it is likely to suffer a sudden collapse from the repeal of those laws. American sentiment is rapidly crystallizing against the fool-laws that are checking railroad development and sending traffic over foreign government subsidized lines. Look out for a big smash, Canadian Pacific Neighbors!

M-I-L-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CAREY,
17 Broadway, New York.

FIRING WITH SOFT COAL.

"The Locomotive."

It is too generally assumed, in firing steam-boilers, that the fuel is burned under conditions over which the fireman or engineer has little or no control, and that any man who can keep up a proper supply of steam is equally good with any other man. That such an opinion is very erroneous is fully shown by many almost daily observations, and one case in point will be enough to illustrate the fact. In a certain plant of three or four hundred horse-power the water for the boilers was passed through a meter, the coal was carefully

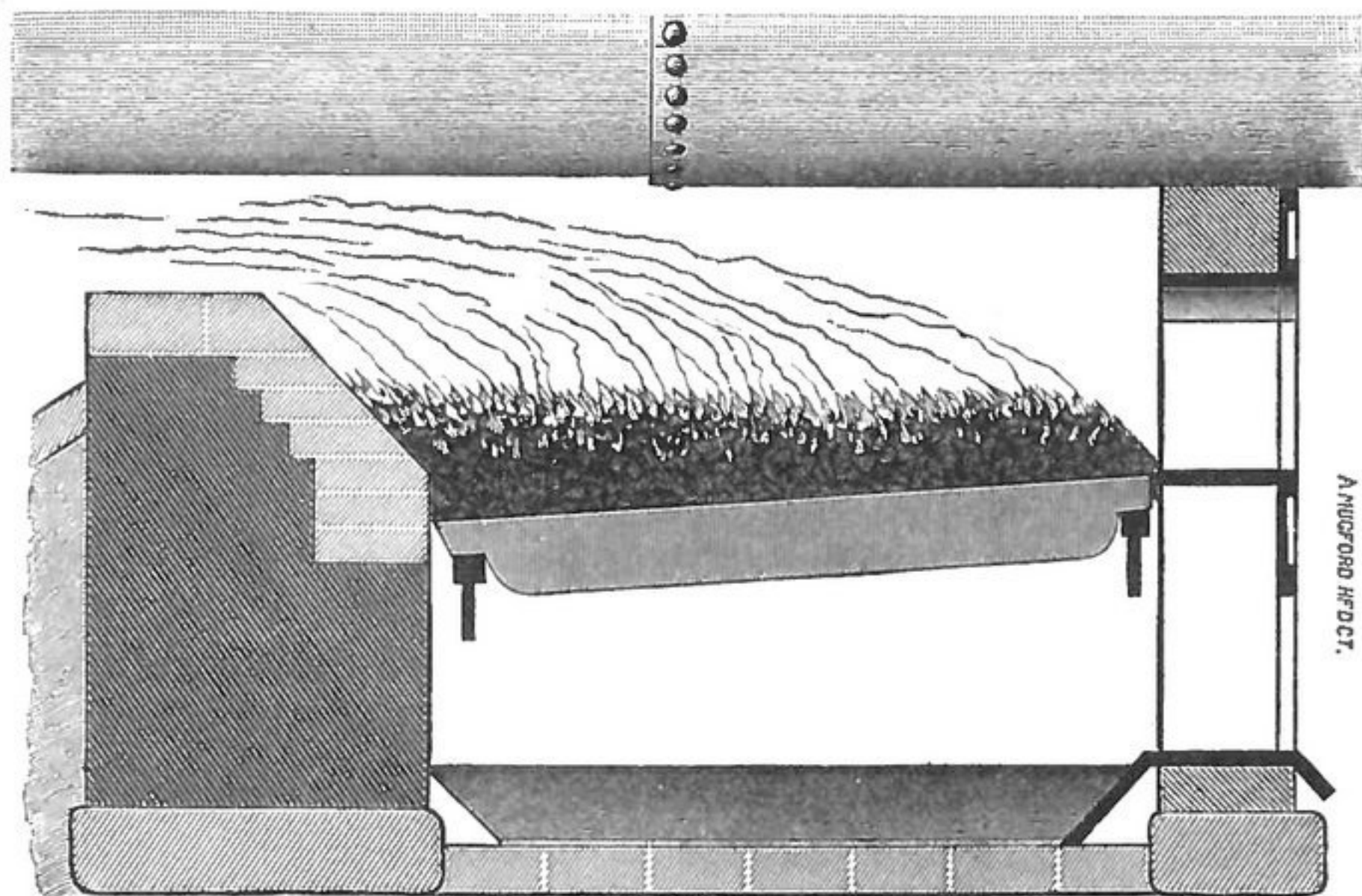


FIG. 1.—A GOOD FIRE.

weighed, and the fire-room log was kept by a competent man. In this way it was easily shown that Mr. A evaporated less than 8 pounds of water per pound of fuel, while Mr. B, apparently just the same kind of a man, evaporated over 9 pounds, the difference between the two results being exactly 2 pounds of water per pound of coal in favor of Mr. B. It is also a fact that much of the waste generally attributed to the steam-engine is in reality due to lack of knowledge and skill in the boiler-room. That a certain quantity of air is necessary to secure perfect combustion is well known; that too much air detracts from the economy and injures the boiler is also well known; and the skilled and experienced engineer needs no anemometer to tell him when he has reached the delicate point where the air supply is just right. A glance at his fires, a knowledge of his chimney draft, a look at his dampers and an understanding of the work his boilers are doing are sufficient to guide him. But there are boilers and boilers, not all of which are cared for or fired in this manner;

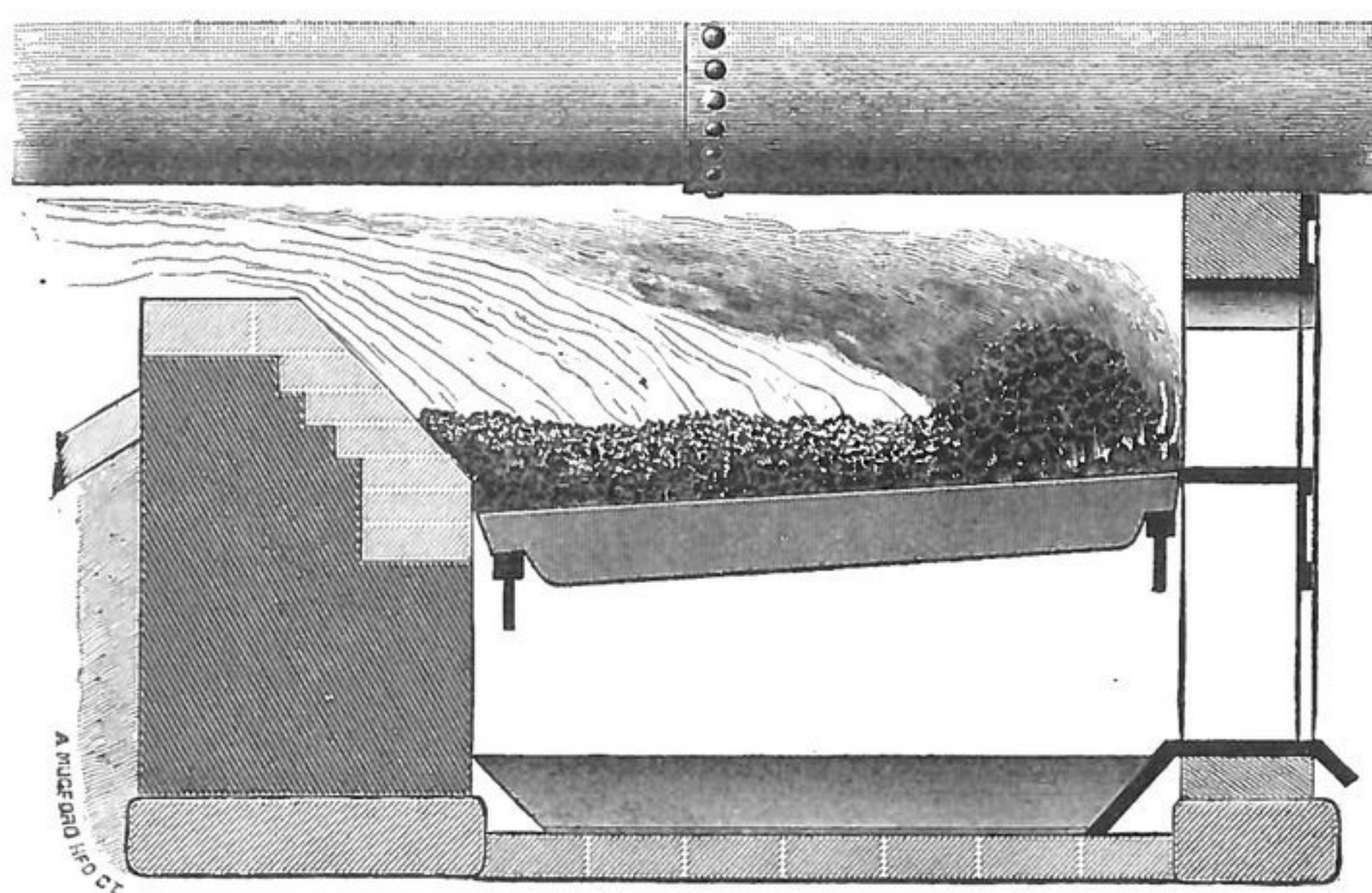


FIG. 2.—COKE FIRING WITH SOFT COAL.

and it is to those that are not that our illustrations apply. In Fig. 1 a bituminous coal fire is shown, from 6 to 9 inches thick. It is kept thicker at the back end and along the furnace walls and in the corners, because the heat radiated from the side walls and the bridge causes the coal in these places to burn faster than that on the rest of the grate. It is kept solid and in form by quickly sprinkling a thin uniform layer of coal on alternate sides of the furnace at frequent intervals, and by filling in such parts as may burn hollow. If the fire is neglected for a short time it is morally certain to burn hollow, and holes will develop, through which the cool

air in the ash-pit will pour up freely, chilling the hot gases of combustion and materially lessening the efficiency of the boiler. Fig. 2 illustrates what is called coke-firing. The grate is covered with incandescent fuel as in Fig. 1, except near the doors, where a windrow 18 inches wide, and built of fresh coal, extends entirely across the front of the furnace. The heat to which this windrow is exposed causes it to coke as it would in a retort in a gas-works and to give off the inflammable gases that it contains, which are burned as they pass back over the incandescent bed of fuel. When fresh fuel is required this mass of coke is broken up and distributed over

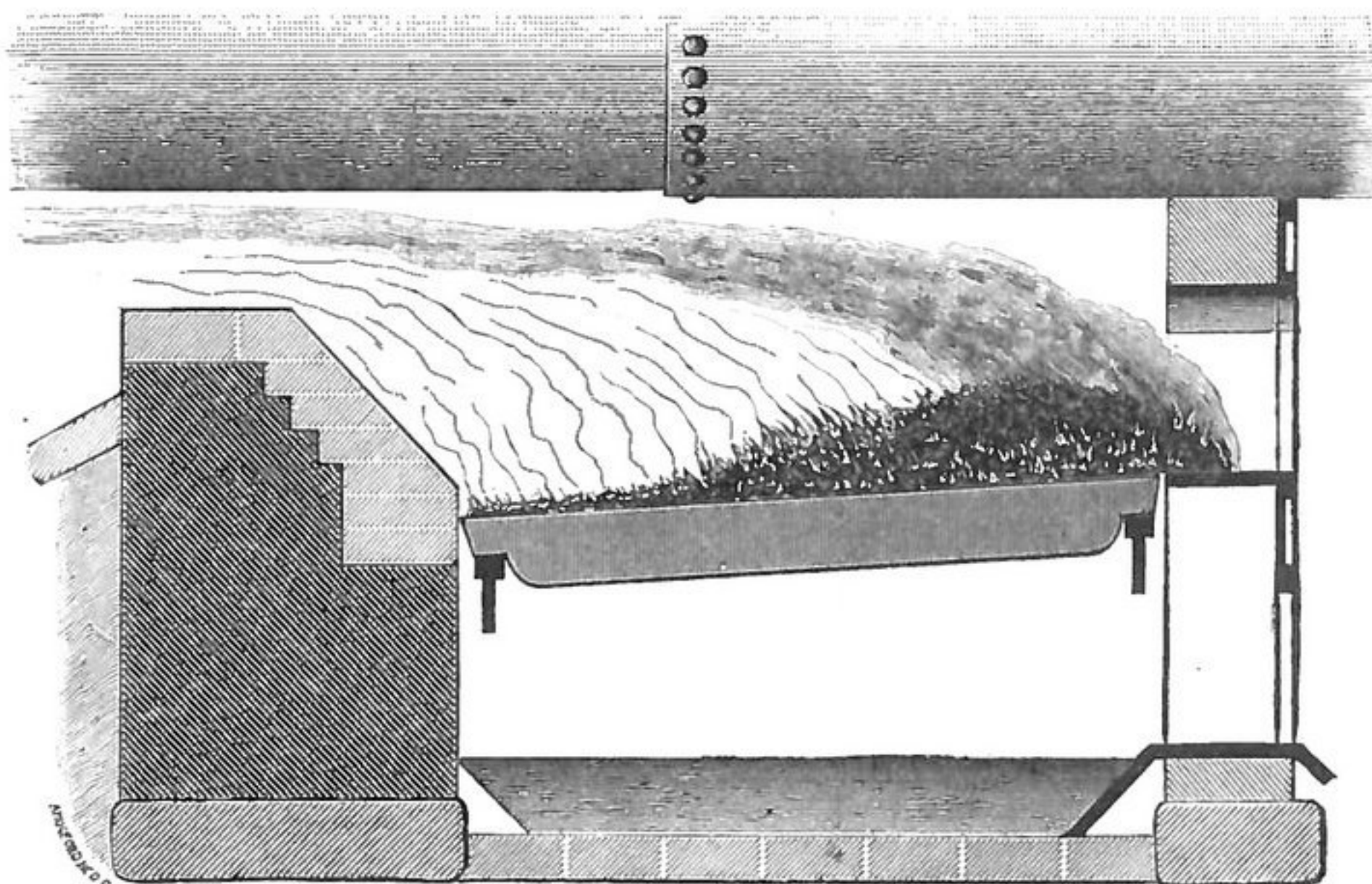


FIG. 3.—BAD FIRING. SIDE VIEW OF FURNACE.

the grate, bearing in mind the necessity of keeping a good supply on those portions of the fire which tend to burn the fastest. When the fire has again become incandescent, fresh coal is put to coke, and so the firing continues. In this method of running a fire it is still all-important to prevent holes from burning through and admitting undue quantities of air into the furnace. Other methods of firing are often seen. One is to fire only at considerable intervals, throwing on coal so heavily as almost to shut off the draft for a time. Fires run in this way and then left to themselves burn hollow, and air rushes through the holes, burning the fuel away around the edges of them and thus constantly enlarging them, until after a time a strong current of cool air passes unchecked up through the grates, along the side walls and the bridge, and the hot gases coming from the coal are so chilled by it that it is almost impossible to make steam. The same result follows when the coal is heaped upon the center

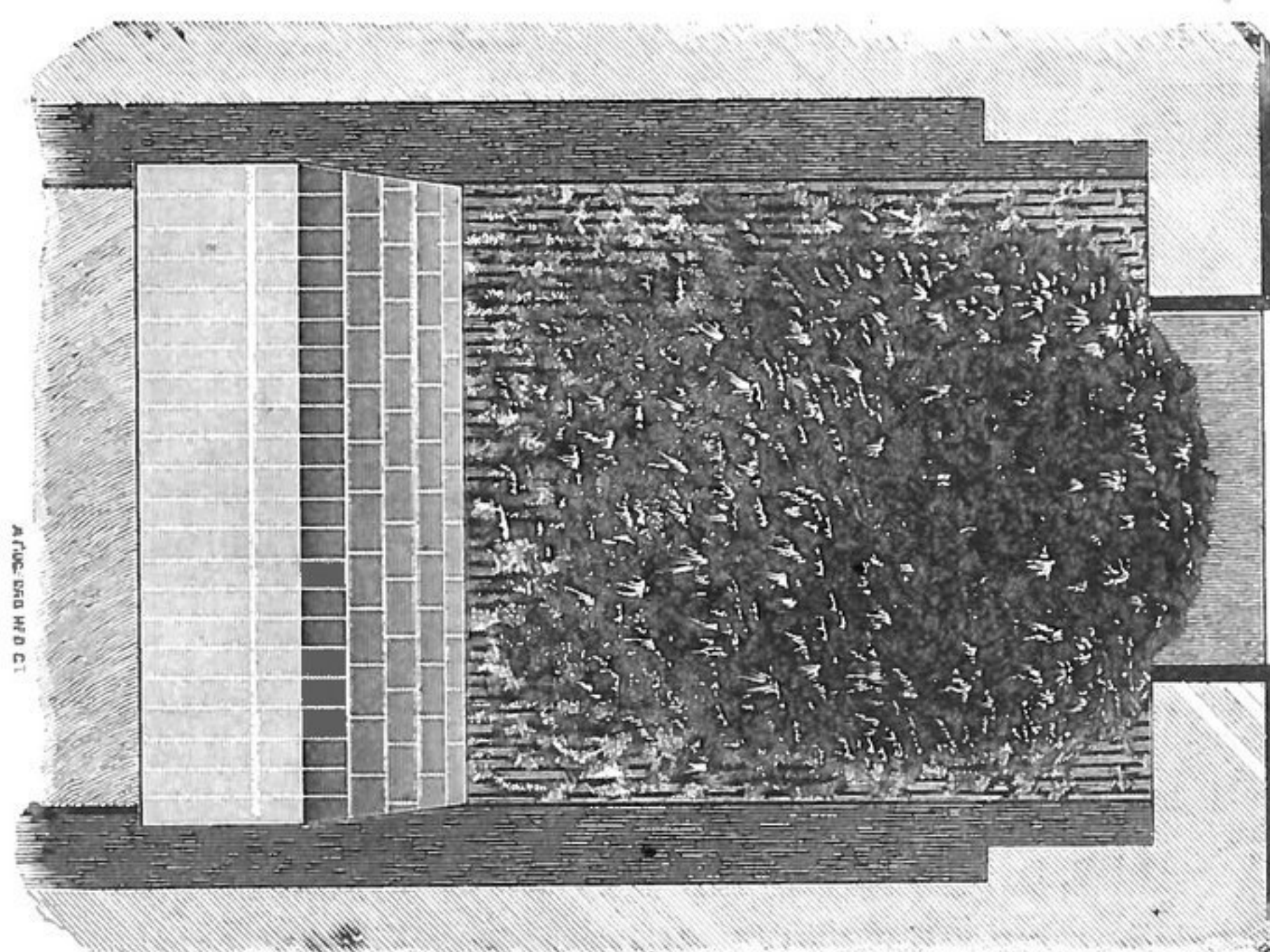


FIG. 4.—BAD FIRING. PLAN VIEW OF FURNACE.

of the grate like a haystack, as shown in Figs. 3 and 4; and in both cases the invariable result is a hard-worked fireman, laboring manfully to keep up steam, and a bitter complaint from the office at the cost of the fuel consumed. The cold air that passes up through the empty places on the grate, and which must be heated and passed out at the chimney, puts a constant drain upon the coal piles and a constant effort upon the muscles of the fireman, who punches and works away, fretting at the poor steaming qualities of the boilers and at his inability to keep up steam. To burn bituminous

coal without smoke has long been the hope of inventors and engineers, for it is generally admitted that an enormous waste occurs when any considerable amount of smoke issues from the chimney. It is true that smoke is a sure indication of imperfect combustion, but the vapor ordinarily seen coming from the chimney is not all smoke. The dense black smoke sometimes seen consists almost entirely of unconsumed carbon, but the composition of the lighter smoke is very different. Most coal contains a considerable quantity of moisture, especially bituminous coal; and this moisture is, of course, evaporated by the heat of the fire and driven off as steam, in company with other products of combustion, giving the light vapor usually seen issuing from the chimneys. Even the densest smoke contains but a small quantity of unconsumed carbon, though of course it is likely to contain a considerable quantity of invisible gases that would have been burned and utilized had the combustion been more perfect. The black smoke is usually given off when long flames of a yellowish or reddish hue lap along the whole length of the boiler and perhaps pass into the flues. When the damper is right, and the draft good, and the fires well laid, so that all parts of the grate are evenly covered, the lazy smoky flame is changed to short flame of intense brightness. Too much air is as capable of producing smoke as too little; for by its chilling action, previously explained, it makes perfect combustion impossible and causes the same dense cloud to appear at the stack. In charging fresh coal it is a good plan to leave the furnace door ajar slightly until the fire has burned up a little, so as to admit an extra supply of air, that which passes up through the grate being checked for a few moments by the fresh fuel. If the door is kept wide open the boiler will be cooled down and may be severely strained, and a big column of cold air will pass right over the fire in a body, and up the chimney; but if the door is kept half or three-quarters of an inch ajar, the air that is admitted will distribute itself through the furnace pretty uniformly and will consume the gases given off by the fresh coal. As soon as these gases burn off the door should again be tightly shut.

POINTS IN MILLING.

AMONG the recent examination questions published with answers by the London "Miller" was the following: In a mill arranged to mill only hard dry wheat, what alterations would have to be made to mill successfully all mellow, soft wheat? The reply furnished by "Prize Medalist" is as follows: "A change from all hard wheat to all mellow wheat would necessitate several alterations. As to break-rollers, more pressure must be applied to clean up bran. More heat will be developed in roller frames; hence a little extra air-draught should be applied to stop condensation. Smooth rollers will at the early stages need pressure to be relaxed; otherwise the softer semolina and middlings may be too heavily reduced, whereby difficulty may be caused in later stages. The break-mill duster should be clothed with coarser silk, or else the purifiers will be stopped up with flour, while the dust-collector is sure to be clogged up from the same cause. If a reel had previously been dusting middlings, it will no longer be a success. The sharp action of the centrifugal beaters is best calculated to render well-shaped middlings. Flour-dressers in the early runs may all be clothed at least one number coarser. Extra speed should be given to the latter runs of dressers in order that the offal may be whipped clear of flour and a clean finish secured."

THE reply of "Prizeman" to the same question was as follows: "In a mill arranged for hard wheats the points requiring alteration for milling soft or mellow wheats would be the break-rolls, which would require releasing, as also smooth rolls, purifiers clothed coarser, silks all down changed to coarser numbers, purifiers would all require a re-adjustment of valves, more exhaust on rolls, all returns reduced or stopped, grading of flours changed, and so on."

ANOTHER point for inquiry was this: The runner of a pair of millstones is in standing, but not in running, balance.

Indicate procedure to put it right. The directions given by "Prize Medalist" on this point follow: "Having set the millstone in motion, I should note and mark the highest point. Assuming that the runner was hung above its center of gravity, that high point should be the heaviest side. It rises because of the tendency of weighty bodies to rise when revolving fast up to the point of suspension. Consequently the point which dips and touches the bed-stone is not the heaviest, but the lightest. To correct this the patent balance-boxes, with adjustable weights, are provided. There are four of them, one to each quarter of the runner; and the weights can be raised or lowered by means of a key and screw. The procedure of balancing, though it often takes a long time to do, is shortly this. Suppose the point which is observed to be highest is called A, then the weights in the quarter nearest A must be raised a little nearer the surface of the back. The weight in the opposite point, B, should be lowered somewhat. The effect of the alteration is that the tendency to rise on the part of a certain buhr, owing to its greater density, is now partly balanced by the weight in A, which, having been raised, now tends to force the stone at A downwards. Similarly the weight at B has been lowered and now exerts more force upwards. The obvious tendency of both adjustments is to restore the equilibrium which is desired. Continued manipulation of the weights will lead to success. I am, of course, assuming that no radical defect exists in driving gear or shaft."

THIS point is settled by "Prizeman" as follows: "The runner of a pair of millstones in standing balance, not in running, should be started with a fast-and-loose pulley arrangement and run at the usual speed; and having marked the 'heavy' or 'dipping' side, the balancing weights, if on the patent principle, should, if found above the point of suspension, be lowered, or the opposite or 'light' side raised above the point or pivot of suspension; by this simple rule the balance may be struck. The centrifugal force of governor balls makes them rise as speed increases, so as to get as far away as possible from axis of rotation, and this is what takes place in a millstone. Thus by changing the position of weights, and not their relative quantity, the running and standing balance are both attained."

ANOTHER point for examination was the following: You have a complete wheat cleaning plant and are treating each wheat separately. Enumerate the separations you would get from Russian, Danubian, Indian, American winters and Californian sorts; and how manipulate them so as to command a ready sale and realize most money. The reply of "Prize Medalist" is as follows: "The separations obtained would be as follows: *Russian*.—Rye, round seeds, screenings and light grain, chaff, smut dust, black dirt, scourings, stones. *Danubian*.—The same generally as Russian. *Indian*.—Gram and peas, round seeds, screenings and light grain, scourings, chaff, dust, smut dust, stones and dirt. *American Winters*.—Round seeds, chaff, screenings, dust, rye, garlic, smut dust and scourings. *Californian*.—Short straws, screenings, round seeds, dust, chaff, scourings. For all practical purposes these various products may be classified as under, the best method of disposing of each is given also: (a) Screenings, including light grains, oats, barley, peas and gram. Ground on millstones, dressed by centrifugal, the finest mixed with pig-feed products. The bran sold as a separate product for cattle. (b) Rye.—Ground on millstones, dressed. Flour sold to billstickers or for rough biscuits; bran mixed with pig-feed or short bran. (c) Round seeds, cockle, clite, hariff and others. Sold to dealers whole, or ground and dressed. The products sold separately. (d) Smut dust and scourings. Sold separately or mixed with low-class pig-feed. (e) Chaff and short straw. Used instead of straw to litter cattle, or to lay in wagons or trucks. (f) Stone and dirt, black dust. Worthless, unless wheat is mixed; in this case throw down to poultry, or sell at value for that purpose."

THE settlement of this question by "Prizeman" is as follows: "Having a complete wheat-cleaning plant, the separa-

tions I should expect to get from the following wheat would be. *Russian*.—Dust and chaff, soil, barley, cockle, rye, sometimes oats. *Danubian*.—Dust and chaff, soil, barley, cockle, rye, sometimes oats. *Indian*.—Dust and chaff, dirt, vetches, stones, barley, kind of pea. *American Winters*.—Dust and chaff, garlic, oats, cheat or rye grass seed. *Californian*.—Dust and chaff, barley, oats. As to most economical method of disposing of these products, that much depends upon what there is most sale for. *Cockle* in some cases can be disposed of for cattle food manufacture at a good price, in others it must be ground up and put into pollard. *Barley*, rolled and mixed with rolled oats, sold to distillery, ground into barley meal. *Rye*, if fairly cleaned, should be ground up with wheat meal, as it gives it a nice flavor. *Oats*, put into rolled oats where sale is good, or ground into barley meal or sold to a distillery. *Vetches*, when washed again and stoned, make capital pea or bean meal, and are as nutritious as either the bean or pea. *Dust* from scourer is also rich in nutriment, and should be kept separate from dust taken away in preliminary aspirations, and mixed into 'sharps' or coarse pollard. All light grains and grass seed aspirated may be damped and flattened on smooth rolls and mixed into bran, or ground on stone, and bran sieved off into bran sacks and the out-siftings sent to pollard."

AMERICAN AGRICULTURE NOT RUINED.

Recently there has been a great deal of talk about the ruination of agriculture in the United States, and many not well informed persons are likely to take it for granted that the farmers have, as a class, got the worst of the bargain in the great changes in prices and the methods of producing and marketing that have taken place within the past 80 years. Such persons will probably be surprised to learn that, notwithstanding the endless complaining of the farmers, they are the only class of men in the country whose produce sells for more now than it did in the "good old times." For instance, here is a table showing what farmers paid for several important articles in 1816, in comparison with what they pay for the same articles now:

	1816.	1889.
Steel	\$0.17	\$0.08
Nails	12 $\frac{3}{4}$	4
Broadcloth per yard.....	16.00	4.00
Wool blankets per pair.....	10.00 @20.00	3.00@10.00
Cotton cloth per yard.....	40 @ 50	4@ 12
Calico per yard.....	25 @ 75	4@ 16
Salt per bushel.....	1.00 @ 4.00	15@ 25

If the farmer has actually suffered through the great changes that have thus cheapened these staple articles for his benefit, his suffering will be exactly measured by a decrease in the price of what he sells proportionate to the decrease in the price of what he buys. Has that decrease been witnessed? Following are the comparative prices of farm produce in the years 1816 and 1889, which tell the story:

	1816.	1889.
Wheat	\$0.25 @ 0.44	\$0.90
Corn.....	12 $\frac{1}{2}$ @ 20	46
Oats.....	15	37
Eggs per dozen.....	5	20
Butter.....	5 12	20@ 40
Cheese.....	3 @ 6	9@ 12
Cows.....	16.00 @20.00	25.00@75.00
Hay per ton.....	3.00 @ 5.00	10.00@20.00
Straw per ton.....	2.00 @ 4.00	7.00@16.00

For farm labor in 1816 the farmer paid from \$3 to \$8 a month, and in 1889 he pays from \$10 to \$16 a month and found. The difference in labor is not however, so great as those figures would indicate, because the laborer, who now receives two or three times what the laborer did in 1816, can by machinery do four or five times as much work, and the use of commercial fertilizers has greatly increased the crops in aggregate yield. Thus it remains true that the farmer of to-day, while paying far less for staple articles than the farmer of 1816 paid, receives from two to three times as much for his farm produce.

Demagogues proclaim, and ignorant persons believe, that the farmers of the United States are steadily and rapidly going from bad to worse, but statistics prepared by experts

at the agricultural experiment station of New York show the contrary. Here is a brief summary that will throw a clear light on the point: 1. There has of late years been a relative increase in the number of farms and of farmers. 2. There has been a steady decrease in the average size of farms in this country. 3. There has been a steady decrease in the relative amount of unimproved land in the farms. 4. There has been a great increase in the purchasing power of farm products. 5. There has been a great increase in the producing power of manual labor through the introduction of farm implements and machinery. 6. There has been an enormous increase in the aggregate value of farms, buildings, stock and implements of husbandry. 7. The indebtedness of farmers is apparently not increasing, and has probably diminished very appreciably the past few years. 8. There has been a wonderful advance in the intelligence of the farming population, an increase in the demands of rural life, and the means found for the gratification of such demands and desires as this changed condition in the average farmer's life has imposed and awakened.

CHEERFUL CHESTNUTICAL CHAFF.

No interviewer was at the dock to ask Columbus how he liked the country. Journalism has picked up since then.—*Philadelphia Press*. Nor was any citizen there to ask Columbus where he got that hat. There has likewise been a gain in the frank cheerfulness of social intercourse.—*New York Sun*. Nor was there any citizen at the dock to ask Columbus the absorbing question: "Do you wear pants?" There has also been a decided gain in the methods of business push, progress and sleepless enterprise.

MILLING PATENTS.

Among the patents granted October 15, 1889, are the following:

Alexander Miller, New York, N. Y., No. 412,775, an elevator-bucket.

John Healea and Geo. G. Healea, LeRoy, Ill., No. 412,847, a corn-conveyor.

Wm. R. Crow, Buffalo, N. Y., No. 412,949, a conveyor.

Franklin Dorr, Baltimore, Md., No. 412,951, a process of treating cereals, which consists in first cooking the grains, then partially drying and cooking the same, then crushing the grains by a prolonged frictional grinding, and in the same operation drying the product and also stimulating chemical changes by the frictional heat generated by the prolonged grinding.

Thomas L. Norman, West Point, Ga., No. 412,975, a barrel or package formed of fabric and having its upper edge turned inward, separable and removable inner and outer rigid head-section, between which said intumed portion extends, and removable fastenings extending down through the outer head-section and the intumed portion into the inner head-section, thereby connecting the outer head-sections together and to the said returned portion.

Thos. M. Nesbitt, Nesbitt, S. C., No. 413,084, a grain-toller.

COTEMPORARY COMMENT.

No premature beer is fit for consumption. A beer under four months old is as injurious as any slow poison ever consumed. No matter how pure the material may be from which the beer is made, it is, however, an impure beer until it has had at least four months to purify itself by eliminating certain yeast germs, carbonic acid gas and other foreign matters.—*Philadelphia "Anti-Adulteration Journal."*

The chief of the Missouri Grain Inspection Department and his deputies are said to have been appointed for political reasons, and it is claimed that none of them know any thing about the grading of grain. Surely this is a serious state of affairs. It is a direct blow at the business of every country shipper who markets his grain in Missouri, and it will prove exceedingly detrimental to shippers and producers as well as to the dealers and commission men at the grain centers of the state. The inspection should be conducted as heretofore until the new inspectors are thoroughly qualified to

inspect grain, or else inspectors should be appointed who, at least, know wheat from oats. This custom of sacrificing the interests of one of the greatest branches of trade of a State to reward political favorites should be relegated to the past. The grain trade has suffered as much as any other from this infamous custom, and it is time to call a halt.—*Chicago "American Elevator & Grain Trade."*

The facts do not justify the oft-repeated claim that while wheat exports have fallen off somewhat as compared with last year, exports of flour show a very heavy increase. There has been some increase, but nothing startling. For July, August and September, 1889, exports of flour from both coasts equaled 2,817,608 barrels, against 2,641,774 barrels for the corresponding period last year.—*Chicago "Daily Business."*

POOR WHEAT CROP IN MICHIGAN.

According to the official estimates made by the secretary of state of Michigan, that state has a poor wheat crop this year. The probable yield of wheat in Michigan this year is 23,127,050 bushels, machine measure. This estimate is based on the acres in wheat in May, as shown by the farm statistics returned last spring, the yield from 163,397 acres threshed as shown by the records kept by threshers, and the yield from 51,110 acres grown on 3,218 farms as shown by a canvass made by correspondents. The average yield per acre in the southern counties is 15.88 bushels; in the central 16.84 bushels; in the northern 12.49 bushels, the average for the state being 15.93 bushels. The above figures represent the yield, machine measure, but investigation by the correspondents shows that no less than 11 bushels in each 100 of the grain as it comes from the machine will blow out when run through the fanning mill, and that the average weight of the measured bushel after cleaning is only 58 pounds. It is safe to assert that no wheat crop ever grown in this state was of poorer quality. The wheat product of the state in the five years, 1884-88, was as follows:

Date.	Yield, bu.	Av. per acre.
1884	24,999,577	16.83
1885	30,376,008	16.91
1886	26,347,245	17.19
1887	22,729,882	13.62
1888	23,171,177	15.88

The average product in the ten years 1878-87 was 27,206,853 bushels, and the average per acre in the same period was 16.88 bushels. The canvass made by correspondents in the southern four tiers of counties furnishes data for the following statements: One farmer in each 100 raised less than 5 bushels of wheat per acre, 9 farmers in each 100 raised 5 to 10 bushels per acre, 26 in each 100 raised 10 to 15 bushels per acre, 34 in each 100 raised 15 to 20 bushels per acre, 20 in each 100 raised 20 to 25 bushels per acre, 8 in each 100 raised 25 to 30 bushels per acre, and 2 in each 100 raised 30 bushels or more per acre. Footing, we find that 70 farmers in each 100 raised in 1889 less than 20 bushels of wheat per acre. The number in each 100 who raised less than 20 bushels per acre in 1888 was 74, and in 1887 the number was 84.

THE WHEAT CROP IN MANITOBA.

Writers and speculators, who are engaged in making the assertion that the wheat crop of Manitoba this year is very abundant and excellent, should read, even though they may not like to believe, the following deliberate statement by the Winnipeg, Manitoba, "Commercial" in a late issue: The local situation may be said to have ruled easier, though prices were not materially changed. At Manitoba country markets prices varied from 60 cents to 65 cents for No. 1 hard, or something in the neighborhood of that grade by sample. At some points prices were lowered a cent or two during the week. Dealers feel depressed at the course of prices, as they claim prices now being paid are too high to leave any margin for shipment. Deliveries are still light through the province, and this is the real cause of the stiff prices. With as many buyers as there are loads of grain offering, there must be considerable competition, and up go the prices. Millers, who were in need of a little wheat to grind, have also been forced to bid up for the grain to obtain it, owing to light deliveries.

Another point to be remembered is that a good deal of the wheat bought from farmers at the top prices will not grade No. 1 hard. Threshing appears to be pretty well in hand through the country, threshers in some districts having completed operations already. Shipments of wheat through Winnipeg amounted to about 40 to 50 cars per week. Out of 50 cars graded at this point for the week ended October 5 only 8 graded No. 1 hard, 22 No. 2 hard, 9 No. 2 northern and rejected 9.

GRAIN ABSORBS MUCH MOISTURE.

The claim that grain absorbs moisture enough on a sea voyage to pay the freight charges has been verified by some test experiments made at the California Agricultural College. Various kinds of grain were placed in a moist atmosphere, and the increase in weight was noted. The greatest was during the first 24 hours, the absorption being nearly 33 per cent, of the total absorbed during the 15 days' exposure. It was computed that perfectly dry grain at 65 degrees F. would absorb as follows: Oats 29.08 per cent.; barley 28.17 per cent.; wheat 25.02 per cent. Under ordinary conditions the percentage is, perhaps, not so high, 15 to 16 per cent. probably being the average.

SECRETARY Plewes, of the Canadian millers' association, asserts that the flouring-mills of the Dominion have a capacity of 15,000,000 barrels a year, while the quantity needed for home consumption is only 6,000,000 barrels. Counting $4\frac{1}{2}$ bushels of grain to the barrel of flour, it appears that the Dominion millers have invested enough money to provide for the conversion of 67,500,000 bushels of wheat into flour in a country whose population can consume only about 27,000,000 bushels. The surplus capacity must represent a large loss on capital tied up, and it will be a permanent or total loss until the Canadians can grow the 67,500,000 bushels of wheat to keep their milling capacity employed, and until, in addition to that achievement, they can find a market at home or abroad for the 9,000,000-barrel surplus of flour. The Canadian geography is against a large increase in wheat-growing in the Dominion, notwithstanding the assertion of Mr. Erastus Wiman that wheat thrives upon frost and ice buried beneath it, and that the vast chilly regions north and northwest of Manitoba are capable of growing enough wheat to feed the world. Geography is a hard thing to butt against, as Manitoba and the northern sections of Montana, Dakota and Minnesota have repeatedly found to their cost and discomfort. Sizing up the situation in the light of the past ten years, it seems safe to predict that milling will never be a really great and commanding interest in the Dominion of Canada, or, in case it is ever to become great, that it must utilize wheat from the United States. The Macdonald government seems to be unwilling to give the Canadian millers the least pretense of justice.

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DELICATE WORK.—A process of engraving on glass and crystal by electricity has been communicated to the French Academy of Science by M. Plante. The plate to be engraved is covered with a concentrated solution of nitrate of potash and put in connection with one of the poles of the battery, and the design is traced out with a fine platinum point connected to the other pole. The results are said to be of marvelous delicacy.

GENERAL NOTES.

THE Western Union Telegraph Company's report for the year ended June 30, 1889, shows the wonderful growth of telegraphy in the United States. Since 1870 the company's lines of wire increased from 112,191 to 647,697 miles, the offices from 5,972 to 18,470, the messages sent from 9,157,646 to 54,108,326, the gross receipts from \$7,138,737 to \$20,783,194, the expenses from \$4,910,772 to \$14,565,152, and the profits from \$2,227,965 to \$6,218,041, while the average charge per message has decreased from 75.5 cents to 31.2 cents, and the average cost per message to the company has decreased from 51.2 cents to 22.4 cents. The profit per message was 24.3 cents in 1870, and in 1889 it was only 8.8 cents.

STATE INTERFERENCE IN PRIVATE BUSINESS.

Other business men than those owning, controlling or operating elevators will be deeply interested in the decision made by the Court of Appeals of the State of New York, in the McEvoy elevator cases, on the 15th of October. The questions involved are of great importance to business men, and the decision appears to mean that the State has the constitutional power to interfere with and to regulate private business, dictating to citizens methods of doing business and regulating the charges they make. All persons and corporations engaged in business in this state are directly and intimately concerned. The history of these remarkable cases is as follows:

In 1888 the Legislature of New York passed an act to regulate the fees and charges for elevating, trimming, receiving, weighing and discharging grain by means of floating and stationary elevators and warehouses. The chief supporter of that measure was Patrick H. McEvoy, of Little Falls, a member of the Assembly from Herkimer county, and it came to be known generally as the McEvoy Elevator Bill. It provided that the maximum charge for elevating, receiving, weighing and discharging grain by means of floating and stationary elevators and warehouses should not exceed five-eighths of a cent per bushel, and that in the process of handling grain by means of floating or stationary elevators the vessels should be required to pay only the actual cost of trimming. The act provided that any person violating its provisions should be deemed guilty of a misdemeanor punishable by a fine of not less than \$250. The operation of the law was not restricted by its terms to corporations, but applied as well to all private persons engaged in the business of elevating grain.

The constitutionality of such a statute was questioned before the bill was signed by the Governor, and shortly afterward prosecutions were instituted, one in Brooklyn and another in the western part of the State, to test the validity of the law. It was sustained in the lower courts, and their decisions have now been affirmed by the First Division of the Court of Appeals. The decision in the tribunal of last resort is not unanimous, as dissenting opinions were delivered by two out of the seven Judges. The principal question presented was whether the Legislature possessed the power to constrain the private owner of a grain-elevator to work at prices limited by statute. If the law was valid, he must

work at those prices or abstain from work at all. Such a regulation, it was contended, was a violation of that provision of the Constitution which declares that no person shall be deprived of his property without due process of law. This contention was answered in the Brooklyn case by Justice Brown of the Supreme Court, now a member of the Second Division of the Court of Appeals, as follows: "While the general proposition is conceded that a person living under our Constitution has a right to adopt and follow such lawful business not injurious to the community as he chooses, yet this right is subject to the power inherent in the Legislature to regulate the use of all property and the conduct of all citizens toward each other, when necessary for the public good."

This power was most emphatically asserted by the Supreme Court of the United States in the celebrated case of *Munn against the State of Illinois*, which was decided in 1876, and in which the prevailing opinion was delivered by the late Chief Justice Waite. In that case it was held that the General Assembly of Illinois possessed the power to fix by law the maximum charges which could be made for the storage of grain in warehouses at Chicago and other places in the state having not less than 100,000 inhabitants. The business of storing grain in such warehouses was declared to be "affected with a public interest" which justified the imposition of public regulations under legislative authority. Numerous cases were cited to show that the common carrier, the miller, the ferryman, the innkeeper, the wharfinger, the baker and the coachman pursue public employments, and that each exercises "a sort of public office." If so, said Chief Justice Waite, it was difficult to see why grain warehousemen did not occupy a like position. He thought that they stood in the very "gateway of commerce" to take toll from all who passed.

According to this decision by the court of last resort, the government of the State of New York has the constitutional power and authority to regulate business, not only for the elevator men of the state, but also for the millers, the farmers, the mechanical plant owners and all others engaged in any kind of production. It is difficult to believe that there is any necessity for such laws in this or any other state. The paternal principle in government is a distasteful one to Americans, and this elevator law seems to be a most extreme case of the most dangerous laws in this direction. The despotic powers of the governments of oriental countries go no further than this law in encroachments upon private rights, freedom, liberty and enterprise. The decision is final, and the law must be upheld, but fair-minded citizens can not help regretting that so great a step towards paternalism in government has been taken in this state.

A CHECK TO THE CONSOLIDATED.

The Consolidated Roller Mill Company, of Chicago, Illinois, commonly called "The Big Four," have met one check in their broad claim of patented rights on all the "important" roller-mills manufactured in the United States. They attempted to stop the George T. Smith Middlings Purifier Company, of Jackson, Michigan, from manufacturing a roller-mill, and the result is set forth in the following notification sent out by that company: "An important decision has just been rendered by Judge Brown, of the United States Circuit Court, Eastern District of Michigan, in the application filed by the Consolidated Roller Mill Co. for preliminary injunction against the Geo. T. Smith Middlings Purifier Co., to restrain them from manufacturing a roller-mill alleged to infringe their patents. Judge Brown has refused to grant the injunction applied for, on the ground that the Geo. T. Smith roller-mill does not infringe the patents owned by the Consolidated Roller Mill Co. This finding was given in writing and concurred in by Judge Jackson. In view of the fact that this decision was given by the same judge that sustained the Consolidated Roller Mill Co.'s patents in their suit against W. A. Coombs, Coldwater, Mich., it shows conclusively the weight and importance of this verdict."

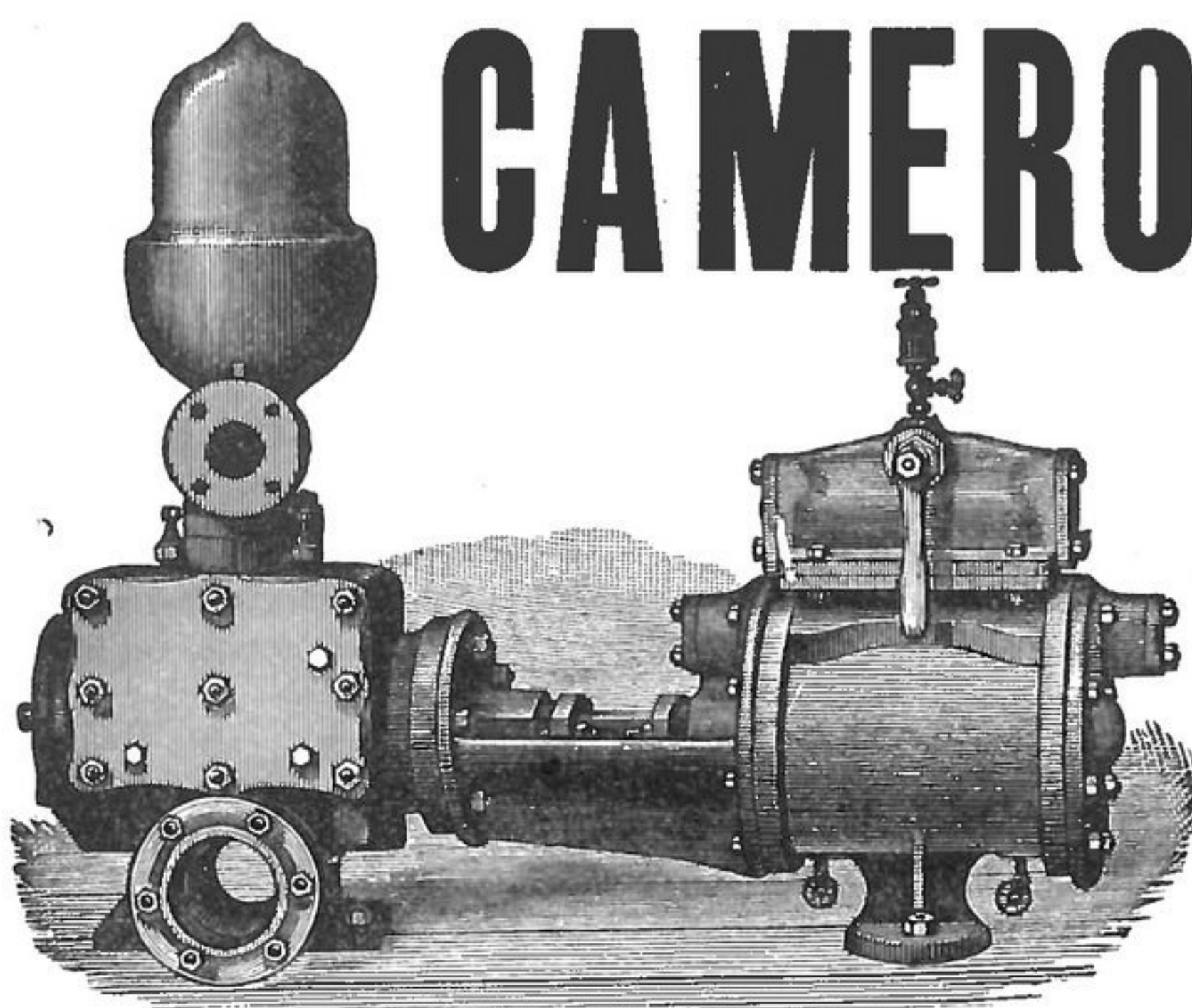
This is check No. 1 for the Consolidated Roller Mill Company, and others are likely to follow. A "claim" assuming

to cover "all the roller-mills of any importance made in the United States" will naturally arouse a general bitter conflict in the courts, and, with the present feeling in this country against monopolies in any important lines, it is not probable that the Consolidated claim will be wholly successful. That "claim" assumes that all the roller-mills, not included in the list sued upon by the makers of the "claim," are of no importance as flour-making machines, which will be news to thousands of millers everywhere. The Consolidated people would be surprised, in all probability, were they to see the hundreds of letters received in the offices of the milling journals on the subject of their "claim." From these letters it seems that the millers, even more than the

machinery makers, resent that "claim." The Consolidated may find some very tiresome uphill work just ahead of it, not only in the courts, but also in the open arena of business.

The November number of *Godey's Lady's Book* is here on time, as usual. *Godey* is always ahead in all its departments, and this month shows up in an especially good number. The publishers promise a real Xmas number for December, when a new and powerful serial will be commenced, entitled "5,000 for a Wife." This promises to be of rare interest, founded upon incidents in real life. Any person sending their address and two cent stamp will receive a cut paper pattern free. Send 15 cents for sample copy to the publishers, Philadelphia, Pa., and see the attractions offered in the Prospectus for 1890.

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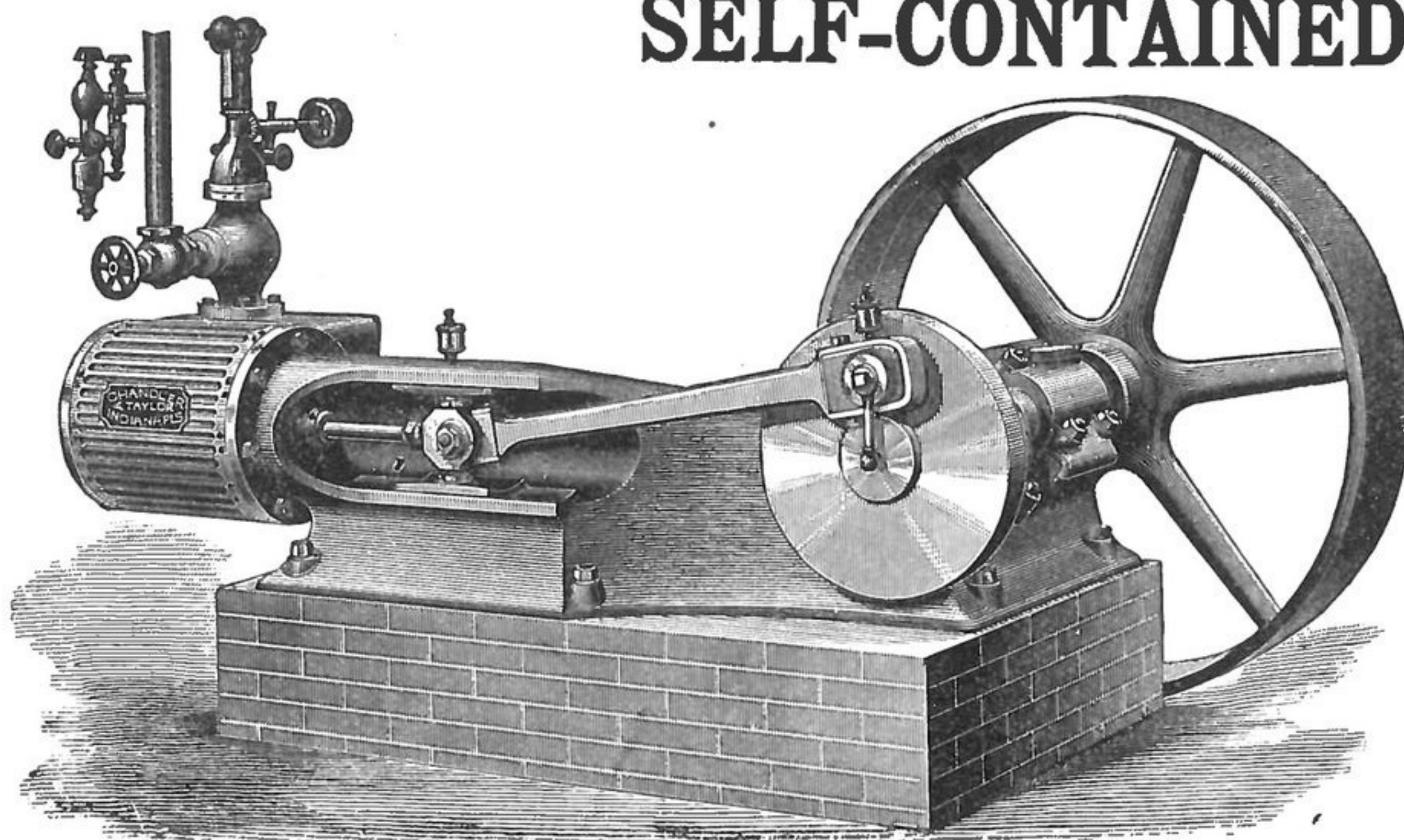
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NOTES & NEWS

Brady, Tex., men, project a grist-mill.
 P. Wilcox, miller, Jackson, Mich., is dead.
 Funk & Anderson's mill, Danville, Ky., burned.
 J. T. Maury, Bellevue, La., will build a corn-mill.
 Mr. Dale, Water Valley, Ark., builds a grist-mill.
 The Eastlands, Tex., Flour Mills remodeled to rolls.
 I. B. Morrell, Bryson, Tenn., will build a flour-mill.
 H. L. Kinzie, miller, Walla Walla, Wash., sold out.
 W. T. Harris, Oak Hill, Ala., will build a grist-mill.
 Norton & Gerken's flour-mill, Parker, Dak., burned.
 The Eldred Milling Co., Jackson, Mich., incorporated.
 J. A. Gunter, Wagener, S. C., will build a grist-mill.
 The Waterloo, N. Y., Roller Mill burned; loss \$40,000.
 Wm. Allen, Meridianville, Ala., will build a corn-mill.
 Chas. P. Edwards, mill-wright, Chatham, N. J., is dead.
 D. W. Raper, Elizabeth City, N. C., will build a grist-mill.
 S. McCall, Willis, Tex., has points on a projected grist-mill.
 The Pioneer Mills Co., Abilene, Tex., project a grain-elevator.
 N. Gregory's grist-mill, Felt's Mills, N. Y., burned; loss \$2,200.
 W. T. Flanders' grist-mill, near McRae, Ga., burned; loss \$2,000.
 Blevins & Cravens, Dardanelle, Ark., want grist-mill machinery.
 The Petersburg, Va., Milling Co. have built a 100-barrel roller mill.
 The Franklin Mill Co., Franklin, Ky., have built a 49,000-bushel grain-elevator.
 Price & Nash's grist-mill, Beaumont, Tex., burned; loss \$4,500; no insurance.
 The New Era Milling Co., Riverdale, Va., are building 50-barrel roller flouring-mill.
 Kirby & Thomas, Chamblissburg, Va., are building a 30-barrel roller flouring-mill.
 T. O. Kilborn, Spring Valley, Minn., will build at once a large steam flouring-mill.
 The City Mills, Stephenville, Tex., have increased their capacity to 200 barrels a day.
 C. A. Saunder's flour-mill, Ellensburg, Wash., burned; loss \$18,000; insurance \$12,000.
 The L. C. Porter Milling Co.'s flouring mill, Winona, Minn., burned October 23; loss \$150,000.
 Jos. Minchener, Troy, Ala., proposes to build a grist-mill with a capacity of 25 bushels an hour.
 Garth, Nash & Robinson, Bryan, Tex., will build a grist-mill; they want an outfit of machinery.
 Stephenville, Tex., men propose to form a \$20,000 roller flour-mill stock company, to build a mill.
 Thomas Winstead and James Edmonson, Franklin, Tenn., have built a grist-mill at Primm's Corners.
 Marcellus Hean's grist-mill, near Seaford, Del., burned; loss \$5,000; insurance \$2,500; fire mysterious.
 McDaniel & Morlock, flour-mill, Rickreal, Ore., dissolved, Morlock selling his interest to George White.
 The Kansas City Mining & Milling Co., capital stock \$135,000, has been incorporated in Kansas City, Mo.
 W. J. Finks, Marlin, Tex., has points about a new company that is to be organized to build a flouring-mill and a grain-elevator.
 The Farmers' Alliance, Dexter, Tex., have incorporated the Dexter Gin & Mill Co-operative Association, to build a corn-mill and a cotton-gin.
 J. F. McClure, Rome, Ga., is improving the McWilliams flour-mill, which he recently bought. He will remodel to rolls some time next spring.

Scruggs & Whary, Gainesville, Tex., whose flour-mill was damaged by a recent boiler explosion, are rebuilding; capacity 150 barrels a day.

T. J. Boyles and others, Houston, Tex., organized the Houston Novelty Mfg. Co., capital stock \$25,000, to manufacture the Tyler flour and meal receptacle.

The New Birmingham, Tex., Iron & Land Co. have information about a new 50-barrel roller flouring-mill to be built at New Birmingham by Missouri men.

Jos. W. Bronaugh and others, Richmond, Va., have incorporated the Cohoke Co., authorized capital stock \$25,000, to build and operate grist-mills and do a general business.

Says the *Minneapolis Market Record*: The receipts of wheat at country elevators are on the average showing a small decline. In most parts of Dakota the farmers were still hauling their grain, according to today's elevator reports about as actively as at any time, while in the greater part of Minnesota there has been a lighter movement for the last two days.

Says *Chicago Daily Business* of October 23: The northwest sent in a confusing mass of testimony on the situation in that quarter. It was asserted with positiveness on the one hand that farmers' deliveries were falling off, and that the effect would soon be felt in the rail movement, and on the other that the large elevator companies were unanimous in the opinion that there was no let up in sight, that to the extreme range of their vision and information the channels and avenues were plugged full of wheat, the only trouble being scarcity of rolling stock to haul grain.

Says the *Winnipeg, Manitoba Commercial* of October 21: Dealers complain that prices are beyond legitimate values, but still they keep on bidding for the stuff. Prices paid to farmers at provincial points last week ranged from 60 cents to 65 cents for best samples, supposed to be equal to No. 1 hard, but a good deal purchased at the top prices will not grade No. 1 hard. At a few points 66 cents and as high as 67 cents was paid, but these prices were exceptional. The average would be about 63 cents to 64 cents. At the mills in the city 69 cents was the top price for the week paid to farmers. This was at the close of the week. Earlier 67 cents was the highest paid. At Montreal nominal quotations were advanced 2 cents toward the close of last week, No. 1 hard being quoted at 98 cents to \$1, and No. 2 hard at 96 cents to 98 cents. Dealers claim that these quotations are above the basis of actual sales.

BOOKS AND PAMPHLETS.

The author of "Wheat-growing in the Northwest," which appears in the November *American Agriculturist*, is a practical man, and the points he communicates deserve attention. His article is short, and every farmer who reads it will be the wiser. It is interesting to note that the California man, Charles H. Shinn, who collected the statistics of California's fruit business for the *American Agriculturist*, was himself astonished at the way in which the ciphers galloped along underneath his pen. For example, he found the total green fruit product of the State in 1888 to be 275,000,000 pounds. The total crop of the year was valued at \$8,000,000. And yet, Mr. Shinn says, California has only made a beginning in the occupation of supplying the dried and canned fruit and most of the fresh fruit for the rest of the United States. The public will find food for reflection in these figures and facts in the November *American Agriculturist*.

It always seems as if *Good Housekeeping* grows better as the Winter draws near. At any rate the number for October 26, just out, is an extra good one. A splendid Amateur Entertainment is described by Mrs. Isabella Laning Candee in "The Carnival of Authors." It is worth trying everywhere. "Simplicity in the Home" is a short paper but very good by Abby M. Gannett. Helen Frances Bates furnishes a graphic account of "Keeping House in Arizona," which, or something like it, has probably been duplicated in the experience of many who will read the paper. Katherine Taylor finishes her valuable series on "Painting on China." The first installment is given of a most interesting story, "Wash Ladies," by S. E. Boggs. Content Greenleaf has a fine paper on "Our Every-Day Fruit," which is soon found to be the apple, and gives excellent recipes for its use. These are some of the samples only. There is much more as good and perhaps better, and the general departments are full and good.



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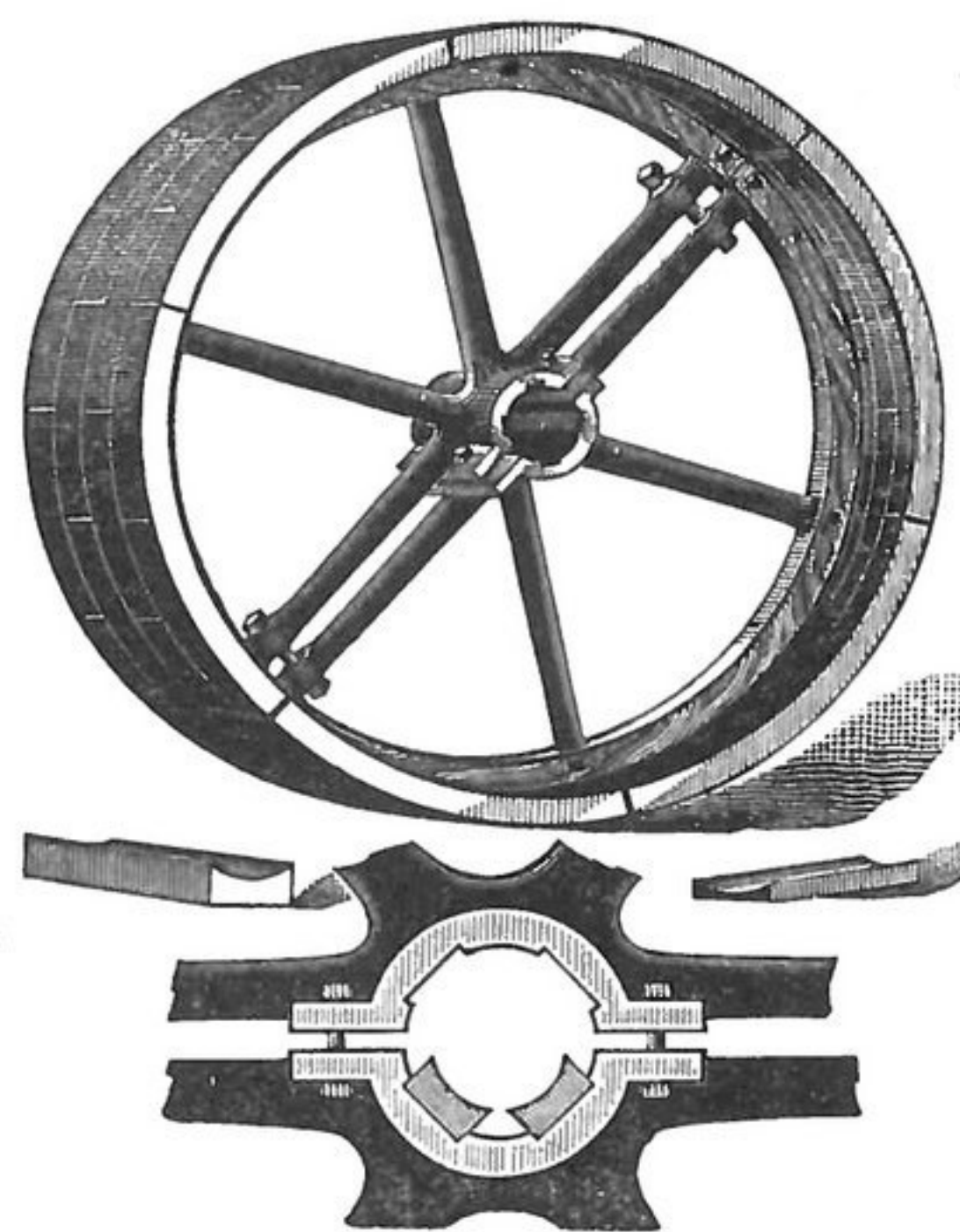


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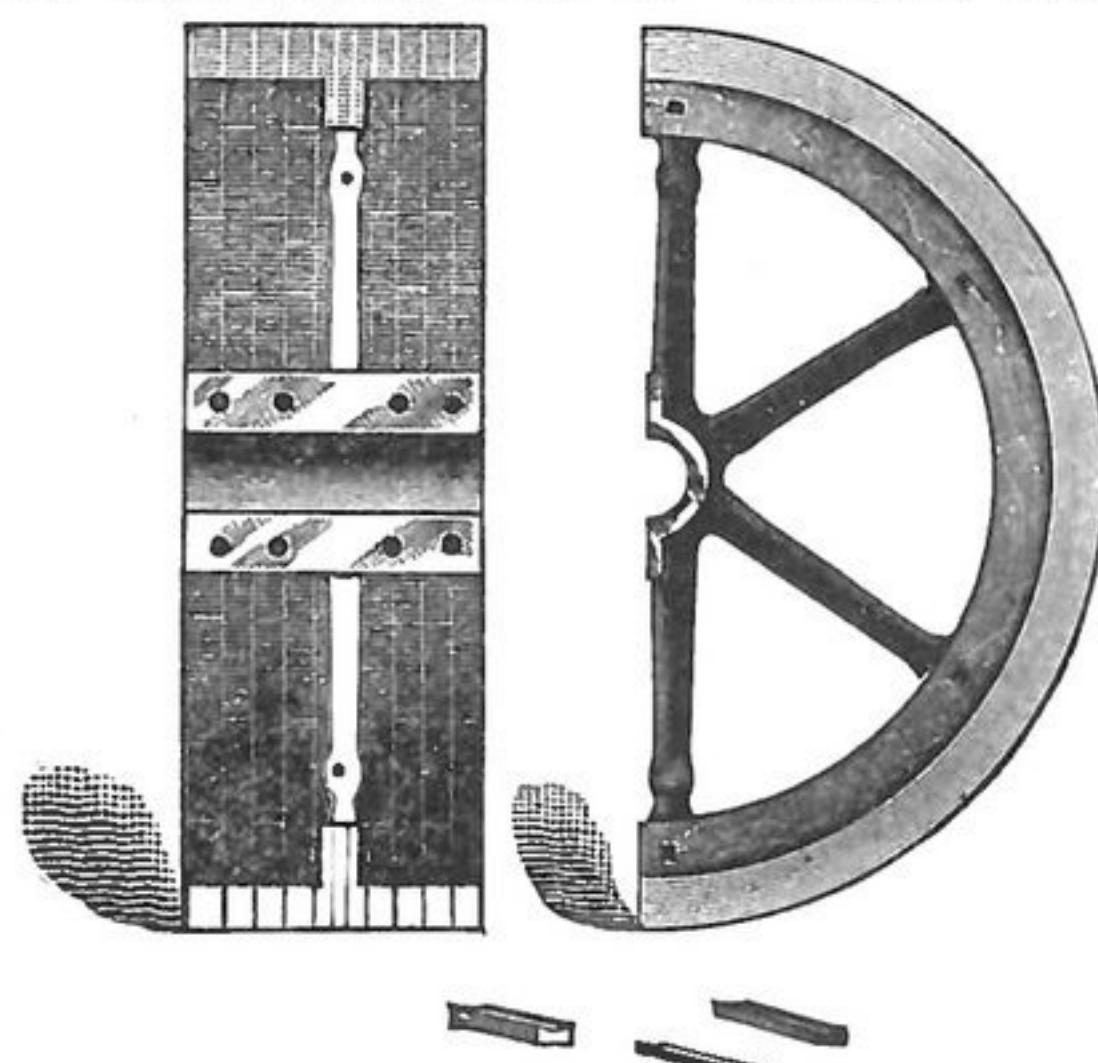
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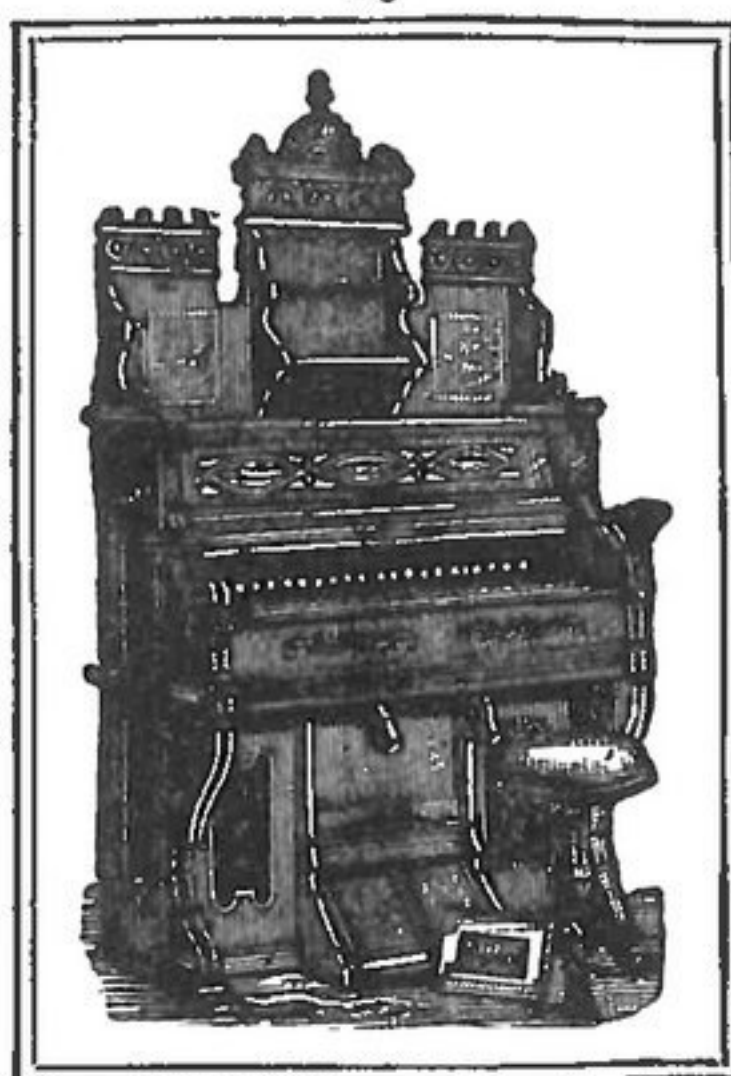
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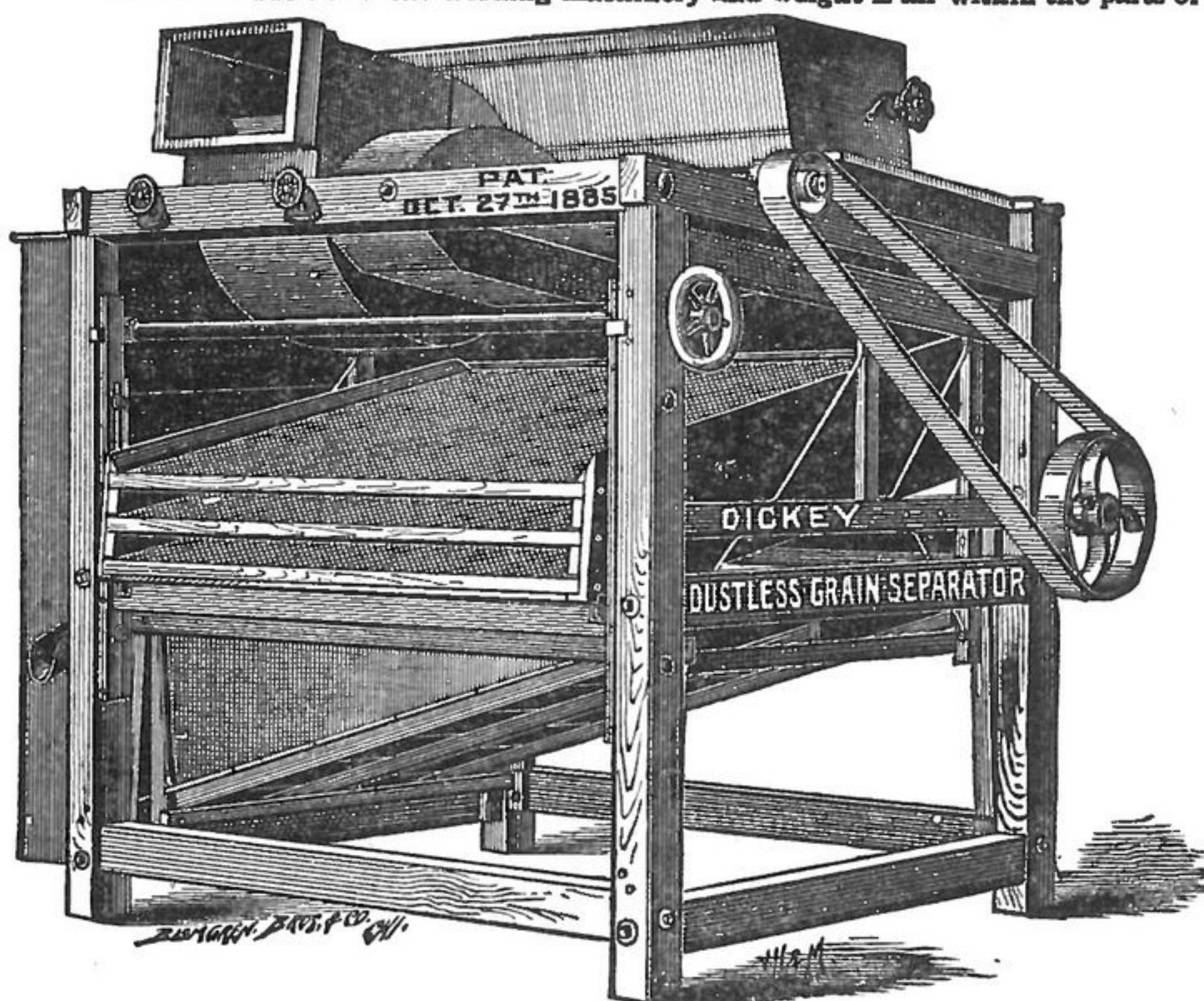
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EUROPEAN ECHOES.

THE much-talked-of "Haggenmacher Plansichter" seems to have gone suddenly out of the public eye of Europe. It probably got a chill at Louvain, Belgium, recently, and is laid up for repairs.

IN Germany bearings made of glass are now being tried in roller-mills. This material is a hard, clear substance and must wear down smooth and give a fine bearing surface for a shaft to rest upon. It is a non-conductor of electricity, if not of heat, and the fine particles have a good chance to work down the bearing of the journal to a running fit, as in the grinding-in of a valve, and much power is expected to be saved by converting the wearing of a journal into some other agency than heat.

DURING the month of August the exports of flour from Fiume amounted to 91,936 quintals, including 12,029 to Glasgow, 29,988 to Liverpool, 5,380 to London, 2,241 to Hull, 13,345 to Rouen, 1,600 to Bordeaux and Antwerp, 525 to Barcelona and 26,378 to the Brazils and other South American ports. The total shipments for the eight months ended August 31 are 796,920 quintals. A decided falling off in these shipments is now to be expected, nearly all the merchant mills of Hungary having agreed to work only two days up to April 30 in the case of the Pesth mills, and one day in each week in the case of the provincial mills. By this decision it is estimated that the mills in question will reduce their requirements of wheat by about 1,000,000 quarters.

SAYS the London "Miller" of October 7: Market matters have paused, and, while without much reaction, prices for wheat have lost their stiffness. Supplies are now much in evidence that very few buyers can be brought to believe that they should operate freely now because later the conditions may be adverse to them. Plenty is in sight, plenty from farmers, plenty from importers, and so millers have an excuse for deliberative buying. Some, doubtless, will be content to get in stocks of suitable wheat at present rates; they have the opportunity of a cheap market and will be content to secure it rather than await the chance of other equally good opportunities succeeding. Truly, in the past week, the "wheat future market" has been formally instituted, and those who wish to deal six months ahead can book their bargains and rest on their oars for the campaign. Probably some millers will avail themselves of the "new departure," where they have to make contracts for six months' supply in advance, but otherwise it is doubtful if the speculative elements of the money market will be adopted by the bona fide wheat market, whose main operations are still in the selling and buying of actual wheat. Outsiders may be willing to buy "lottery tickets" in wheat as well as in brewery or other shares.

SAYS the London "Miller:" "It is remarkable how active are our American cousins in forwarding to us not merely flour, that staple food, but all kinds of alimentary products in a manufactured form. For instance, a glance at the statistics of our foreign imports during the year 1888 will show that Great Britain received within that period from the United States alone 410,591 hundredweights of oatmeal and groats and 14,305 hundredweights of maize meal. Now these quantities are not very alarming, but still the question arises, is it necessary that Great Britain should be indebted to any foreign country for the manufacture of any cereal product? As regards maize there can be no difficulty with the supply of the raw material, because the same statistics show that last year we imported nearly 10,000,000 hundredweights of maize or Indian corn from the United States, and close upon 9,000,000 hundredweights from Russia and Roumania. It is for our millers to consider whether they can not utilize some of their motive force and a portion of their machinery in the manufacture of such products as

hominy, maizena and many other similar preparations. Of course to dispense with American importations of flour and other cereal products altogether would be hopeless, but there is surely room for our millers to make no inconsiderable additions to their profits by embarking in the manufacture of what may be termed the little luxuries of household consumption."

CONCERNING the grain situation in Austria-Hungary the Liverpool "Corn Trade News" says: The export trade has been stagnant for some time past; this circumstance deserves the more attention, because, as a rule, business for some time before the closing of navigation becomes more lively. A little more activity is noticed in the transport of cereals by rail, particularly in Bohemia, Moravia and Upper Austria. Bohemian, Moravian and Hungarian barley are the most in request; heavy lots of these sorts have been dispatched from South Hungary to Fiume. Business in oats has lately increased and was particularly brisk for Bohemian sorts. There has hardly been any inquiry for wheat from abroad. The present state of the wheat market of this country is in complete contrast with the activity of the season 1888-9. Official figures for the export are only given for the first 11 months of the season 1888-9. In that period the export was: Wheat 2,026,000 quarters; rye 42,900 quarters; barley 2,290,000 quarters; maize 237,700 quarters; oats 251,400 quarters; flour 1,307,400 sacks.

POSSIBILITIES POETICALLY PORTRAYED.

If the bears would stop lying about the new wheat,
What a wonderful world it would be!
If the bulls would boom prices fair-square, without cheat,
What a wonderful world it would be!
If the long-system man could but look with content
On the lengthening procession that's short-system bent,
And a bump on his head make a lump, not a dent,
What a wonderful world it would be!
What a wonderful world it would be, my boys,
What a wonderful world it would be,
If the bulls talked but Greek,
And the bears could n't speak,
What a wonderful world it would be!
If all snarlers and growlers were bundled below,
What a wonderful world it would be!
If the kickers on crops all went with them in tow,
What a wonderful world it would be!
If wheat prophets would predict successfully "before,"
Or would hit the wheat crop within 10,000,000 score,
Or never cry "failure" when there's good wheat galore,
What a wonderful world it would be!
What a wonderful world it would be, my boys,
What a wonderful world it would be,
If "Old Hutch" turned wheat farmer
And "cornered" Phil Armour,
What a wonderful world it would be!
If the owners of patents could foreclose the earth,
What a wonderful world it would be!
If Minneapolis craniums would keep normal girth,
What a wonderful world it would be!
If the fake daily journals would let crops alone,
If the ancient buhr-miller would give up his stone,
If Ras Wiman grew wheat in the North Frigid Zone,
What a wonderful world it would be!
What a wonderful world it would be, my boys,
What a wonderful world it would be,
If authors on milling
Could meet without killing,
What a wonderful world it would be!
If a barrel of fine flour from 3 bushels we'd grind,
What a wonderful world it would be!
If one milling journalist toward another felt kind,
What a wonderful world it would be!
If Europe were 900,000,000 bushels short on wheat,
And America called all that shortage to meet
With all her big surplus of No. 1 Hard, sweet,
What a wonderful world it would be!
What a wonderful world it would be, my boys,
What a wonderful world it would be,
If the other chump's ox
Were e'er gored in soup stocks,
What a wonderful world it would be!
If slush-slinging mill-poets were smothered in mush,
What a wonderful world it would be!
If all editors refused to publish rhymed mill gush,
What a wonderful world it would be!
If millers in England bought their wheat in Dakota,
Scraping it up from Minnesela to Lakota,
And shipped it, un-monkeyed, from Duluth, Minnesota,
What a wonderful world it would be!
What a wonderful world it would be, my boys,
What a wonderful world it would be,
If millers, without voracity,
Would decrease their capacity,
What a wonderful world it would be!

Duluth, Minnesota, October, 1889.

Bang.

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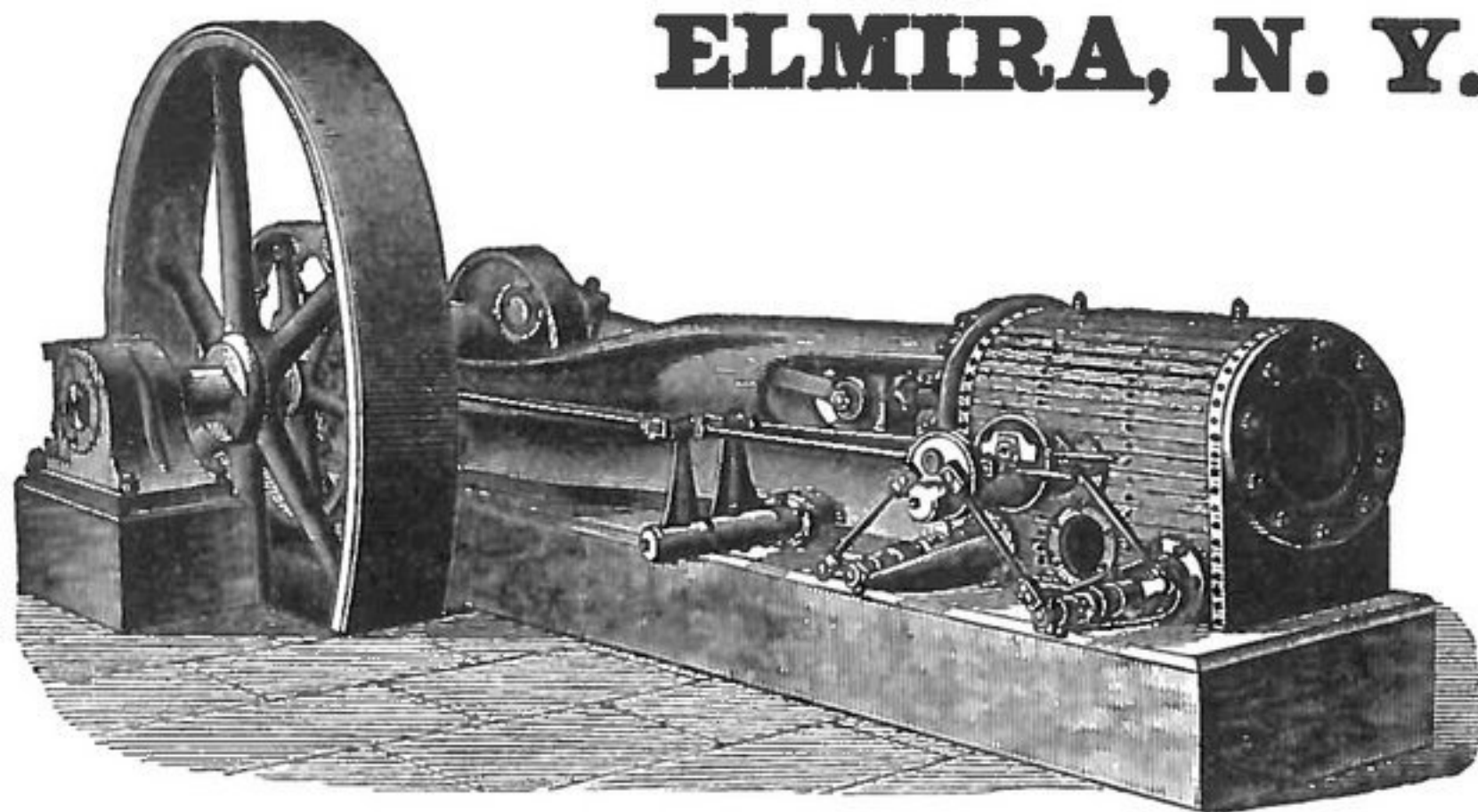
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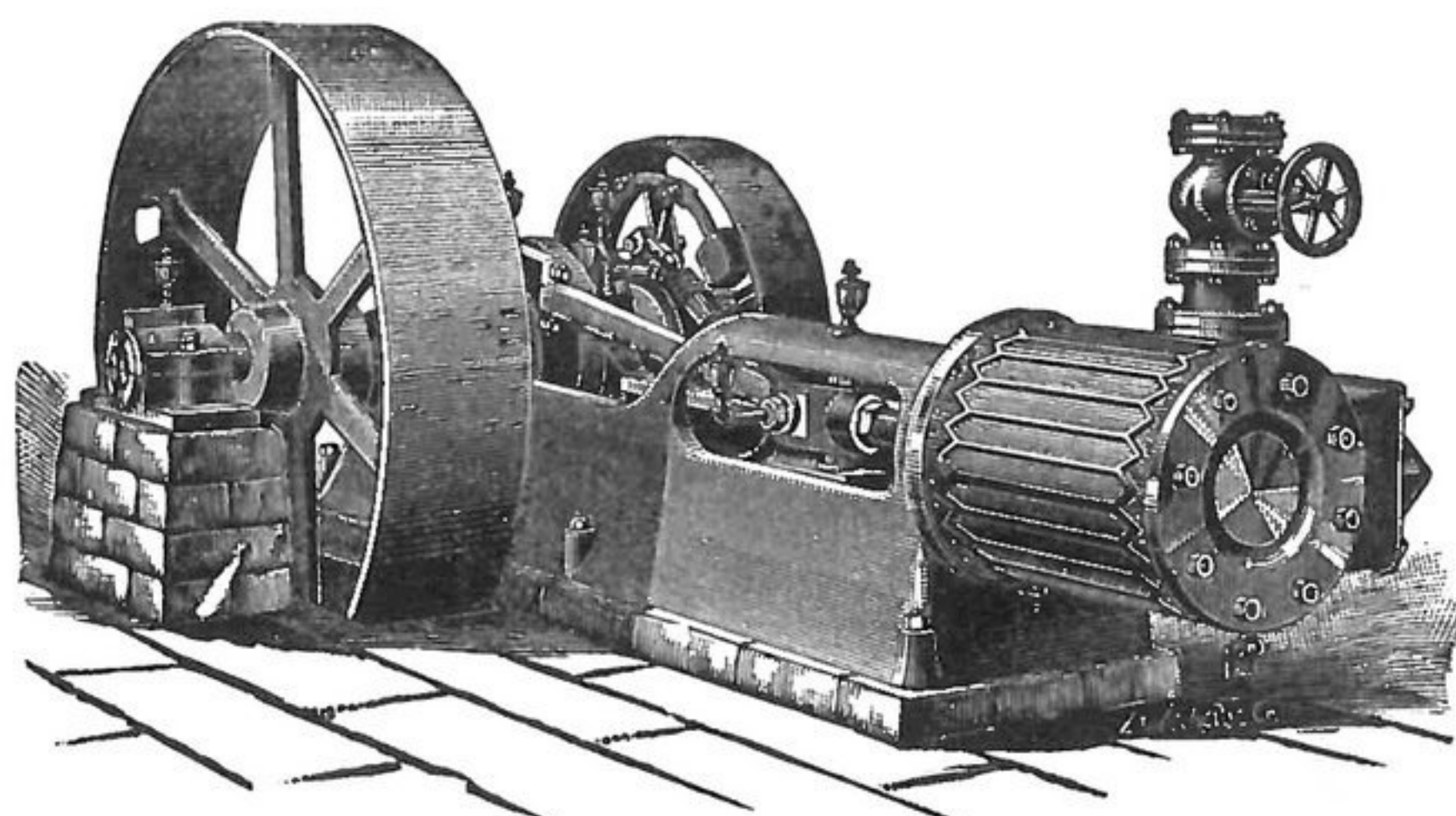
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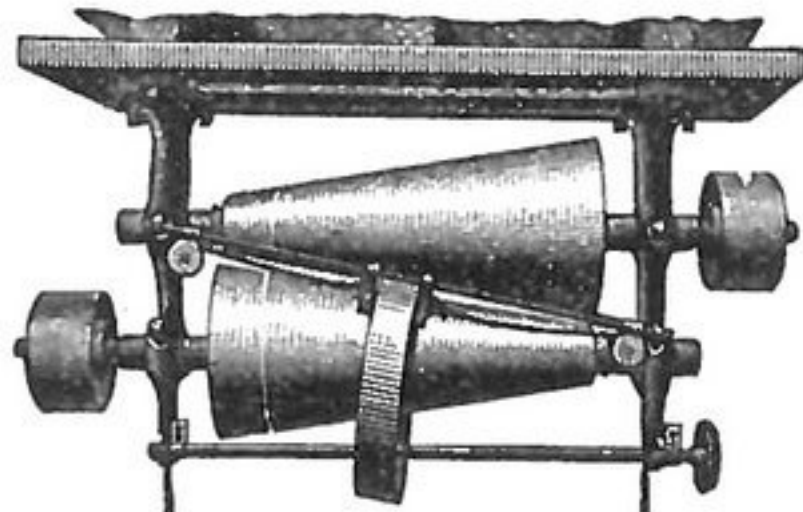


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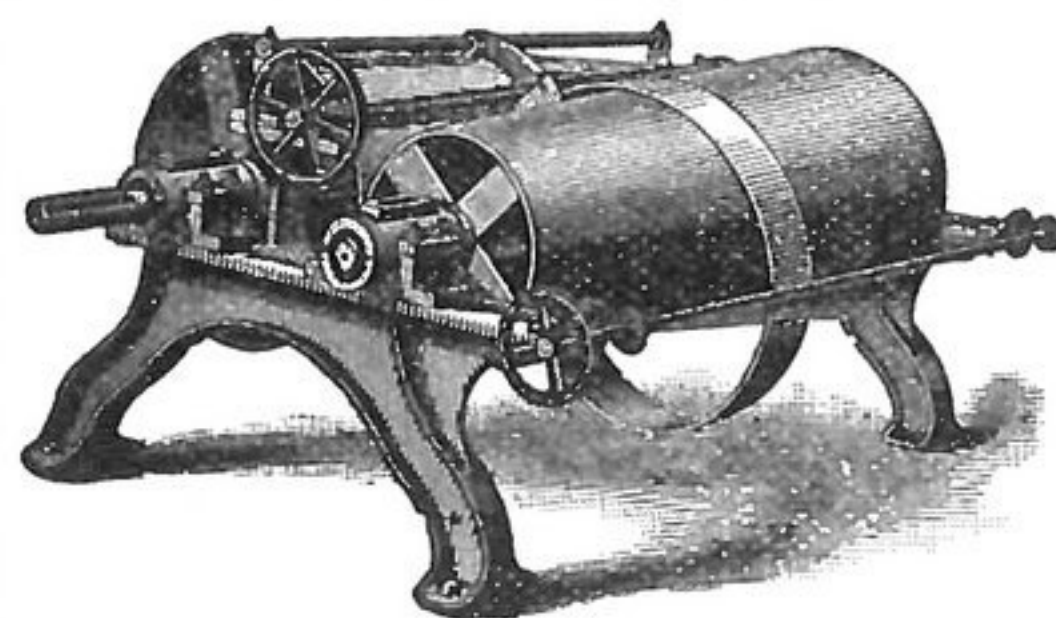
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OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Oct. 26, 1889.

Friday of last week was a day of dull, weaker and generally lower markets, on large receipts, small shipments and realizing in New York. October wheat closed at 84c., with Atlantic port receipts 87,000 bushels, exports 29,500, and options 3,160,000. October corn closed at 38½c., with receipts 207,278 bushels, exports 140,151, and options 600,000. October oats closed at 25c., with receipts 171,690 bushels, exports 20,400, and options 250,000. Wheat flour was dull and in buyers' favor in New York, with receipts 7,295 sacks and 34,044 barrels, and exports 22,577 sacks and 9,231 barrels. The other lines were featureless.

Saturday brought further free realizing and general liquidation, large receipts in the Northwest, and active and lower markets generally. In New York October wheat closed at 83c., Atlantic port receipts 737,776 bushels, exports 34,719, and options 9,600,000. The exports of wheat grain and flour from all American ports for September and up to Oct. 12 were 9,762,000 bushels, against 13,057,000 bushels for the same time in 1888. October corn closed at 38½c., with receipts 263,134 bushels, exports 324,542, and options 400,000. October oats closed at 25c., with receipts 345,226 bushels, exports 10,020, and options 140,000. Wheat flour was dull, easy, slow and out of demand. New York receipts were 21,380 sacks and 36,678 barrels, and exports 9,466 sacks and 27,236 barrels. The minor lines were featureless.

Monday brought excited active and lower markets, led by wheat, on large receipts and free realizations. October wheat closed in New York at 82½c., against \$1.09¼c. on the same date a year ago. Atlantic port receipts 163,025 bushels, exports 9,697, and options 17,560,000 bushels. October corn closed at 38½c., with receipts 323,983 bushels and exports 14,500. October oats closed at 24½c., with receipts 184,440 bushels, exports 13,390, and options 750,000,000 bushels. Wheat flour broke from 5@10c. all around. The general decrease was 10c. London cables were 6d. off, and private cables announced no increase in demand after the heavy break in prices. The minor lines were featureless. The visible supply in the United States and Canada was:

	1889. Oct. 19.	1888. Oct. 20.	1887. Oct. 22.
Wheat.....	22,037,370	32,972,370	32,656,565
Corn.....	11,334,476	11,203,351	7,924,368
Oats.....	7,113,311	7,757,581	5,790,442
Rye.....	1,277,778	1,202,342	313,845
Barley.....	1,582,573	1,401,070	2,142,776

Tuesday brought another slump in wheat. Small demand and large receipts unsettled wheat and sent October down to 81½c. at closing, with Atlantic port receipts 100,000 bushels, exports 28,734, and options 10,760,000. October corn closed in New York at 38½c., with receipts 190,233 bushels, exports 139,848, and options 460,000. October oats closed at 24½c., with receipts 103,645 bushels, exports 15,193, and options 500,000. Barley was quoted 66½c. for extra No. 2 Canada to arrive. Rye was quoted at 51@52c. for No. 2 Western. Wheat flour was again dull and in buyers' favor without being quotably below Monday's closing figures. The other lines were quiet and featureless.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1889. Oct. 22.	1888. Oct. 23.
Wheat and flour, qrs....	1,794,000	2,272,000
Corn, qrs.....	351,000	179,000

The following shows the amount of wheat and corn on passage to the Continent for the past week, and for the same week last year:

	1889. Oct. 22.	1888. Oct. 24.
Wheat, qrs.....	469,000	628,000
Corn, qrs.....	148,000	43,000
Shipments India wheat to U. K.....		25,000
do do Continent..		5,000

The imports into the United Kingdom for the past week and for the same weeks in previous years were as follows:

	1889. Oct. 22.	1888. Oct. 23.	1887. Oct. 25.
Wheat, qrs.....	181,000	339,000	275,000
Corn, qrs.....	133,000	148,000	106,000
Flour, bbls.....	110,000	164,000	188,000

Wednesday brought a check to the downward course of prices and a slight upward rally in wheat, on lighter movement, which turned sellers into buyers. October wheat closed in New York at 82½c., with Atlantic port receipts 112,971 bushels, exports 70,740, and options 10,750,000. October corn firmed up to 39c. at closing, with receipts 222,434 bushels, exports 76,798, and options 680,000. October oats closed up at 25½c., with receipts 170,366 bushels, exports 3,600, and options 100,000. Buckwheat grain was quiet at 50c. for old and 54c. for new, both nominal. Rye was in better demand at 51½c. for No. 2 Western spot delivered. Barley was steady and in fair demand at 66½c. for No. 2 Canada extra to arrive, and 60c. for 2-rowed State nominally. Malt was quiet and unchanged at the following quotations: Two-rowed State 72@77c; six-rowed do 75@80c; Western 60@75c. for old country-made Canada 80@85c; city do 90@95. Mill-feed was strong at 95c. for 40-lb.; 60@65c. for common to choice 40-lb., 60-lb. and 80-lb.; 80 to 85c. for middlings and 65@70c. for rye.

Among the circulars distributed and discussed during the day by the grain men was one which said: "The holders of wheat have the situation from every standpoint in their favor, for the reason that it is beyond contradiction that receipts of wheat in California and this side of the Rocky Mountains the past 16 weeks have been less than in the same time last year: the visible in this country, afloat and in Europe is 20 per cent. less than a year ago. Russia has exported 9,000,000 less since January 1st than same time last year; India 10,000,000 less. In short, the Vienna estimate is confirmed on every hand showing Europe grew near 200,000,000 less than last year. Prices to-day are only about two-thirds those of a year ago."

Wheat flour was held more steadily with wheat, and prices asked were slightly above those of Tuesday. Buyers and inquirers were ready to close bargains at Tuesday's figures, but sellers refused, and thus trade was checked. The Atlantic port receipts were 9,511 sacks and 32,392 barrels, and exports 22,155 sacks and 3,990 barrels. The quotations were:

SPRING FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.55@1.65	\$....@....
Fine.....	1.90@2.00	2.05@2.25
Superfine.....	2.15@2.35	2.40@2.70
Extra No. 2.....	2.40@2.65	2.65@2.90
Extra No. 1.....	3.10@3.25	3.35@3.80
Clear.....	3.15@3.40	3.50@3.55
Straight.....	3.85@4.15	4.25@4.75
Patent.....	4.75@4.85	4.90@5.25

WINTER FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.70@1.90	\$....@....
Fine.....	2.15@2.40	2.25@2.50
Superfine.....	2.50@2.65	2.50@2.70
Extra No. 2.....	2.55@2.80	2.65@2.90
Extra No. 1.....	2.95@3.90	3.10@3.85
Clear.....	3.50@3.80	3.80@4.05
Straight.....	4.10@4.15	4.10@4.40
Patent.....	4.35@4.50	4.55@4.90

CITY MILLS.		
W. I. grades.....		4.25@4.30
Low grades.....		2.55@2.65
Patents.....		4.95@5.50

Rye flour was dull and unchanged at \$2.75@3.10. Buckwheat flour was quiet at \$1.65@1.85. Corn products were in better demand at the following figures: Coarse meal 77@78c; fine white and yellow 90c; Western and Southern barrel stock \$2.50@2.60; Brandywine and Sagamore \$2.65.

Thursday brought but little change. In New York October wheat closed at 81½c., with receipts 495,000 bushels, spot sales 126,000, and op-

tions 1,048,000. October corn closed at 39¼c., with receipts 190,900 bushels, spot sales 174,000, options 360,000, and exports 232,394. October oats closed at 25½c., with receipts 75,000 bushels, spot sales 128,000, and options 555,000.

Wheat flour was heavy. New York receipts were 4,846 packages, and sales 17,850 barrels. The prices for the day included the following: Low extras \$2.50@2.85; city mills \$4.20@4.40; city mills patents \$4.75@4.75; winter wheat low grades \$2.50@2.85; fair to fancy \$3.00@4.60; patents \$4.15@5.15; Minnesota clear \$3.15@4.10; do straights \$3.65@4.85; do patents \$3.25@5.50; rye mixtures \$3.15@3.85; superfine \$2.10@2.75. The minor lines were all quiet and featureless.

BUFFALO MARKETS.

WHEAT—Spring wheat opened strong to-day, and prices improved all the forenoon. In the afternoon trade was dull. Sales of No. 1 hard were made at 90½c. and No. 1 Northern at 86½c; winter wheat was quit at yesterday's prices. It is very difficult to get cars to load from store, and dealers in a hurry to deliver to outside customers have to buy "to arrive," or wait a or ten days to get cars here. CORN—The market to-day was firmer, but prices were not changed from the quotations of yesterday. OATS—Trade was good at 22½c for No. 2 mixed, and for No. 2 white 25½c in store and 26c on track. BARLEY—Offering were free but no sales were made public. Canada would not sell probably for more than 68c for the best. RYE—No. 2 is entirely nominal on track at about 47c. OATMEAL—Akron, \$6.00; Western \$5.75 per bbl; rolled oats, in cases 72 lbs., \$3.25. CORNMEAL—Coarse, 80@85c; fine, 85@90c; granulated, \$1.50 per cwt. MILLFEED—City ground coarse winter, \$11.00@11.50; per ton; fine do, \$11.00@11.50; finished winter middlings, \$13.00@14.50; coarse spring do, \$11.50@12.00. CANAL FREIGHTS—Quiet and unchanged. Wheat to New York, 5c; corn, 4½c; oats, 3½c. Corn to Albany, 4c; corn to Schenectady and Rotterdam 3½c; to Utica, 2½c; wheat to Syracuse, 2½c; corn, 2½c; wheat to Rochester, 2c. Lumber rates to New York, \$2.50; to Albany, \$2.00. RAILROAD FREIGHTS—To New York, Baltimore and Philadelphia rate points on grain, flour and feed 18c per 100 lbs; to Albany and West Troy, 10½c; to Boston 15½c.

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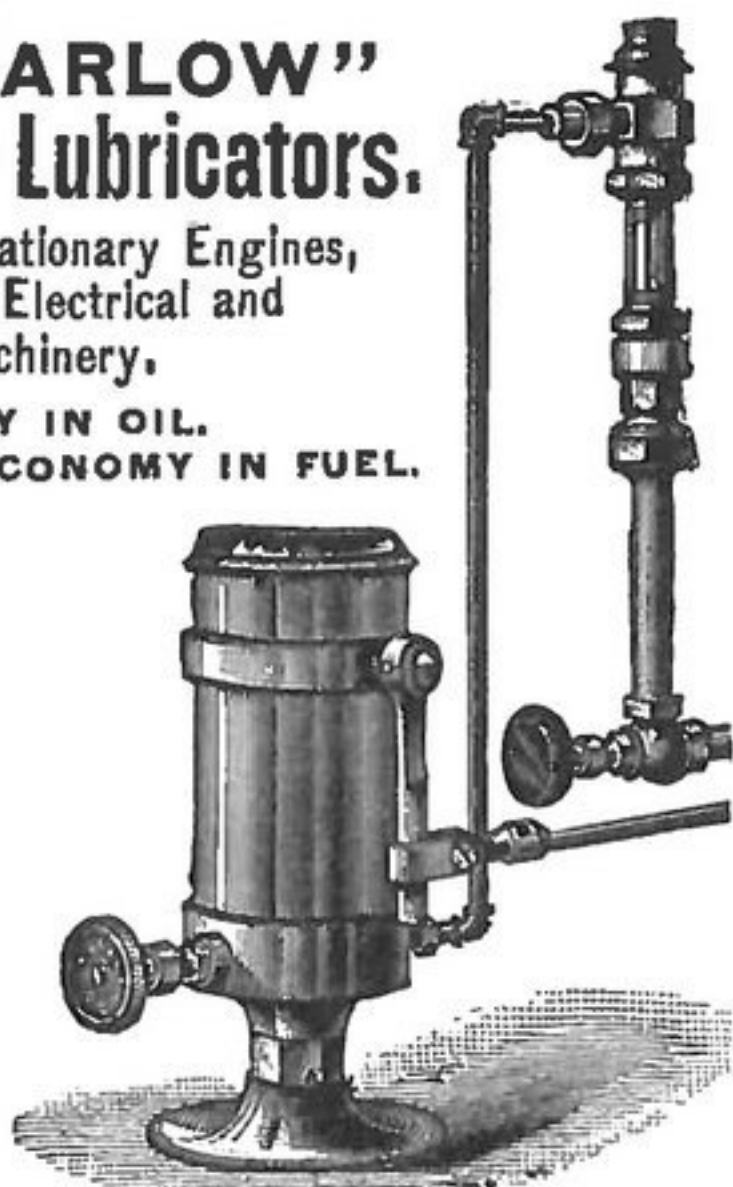
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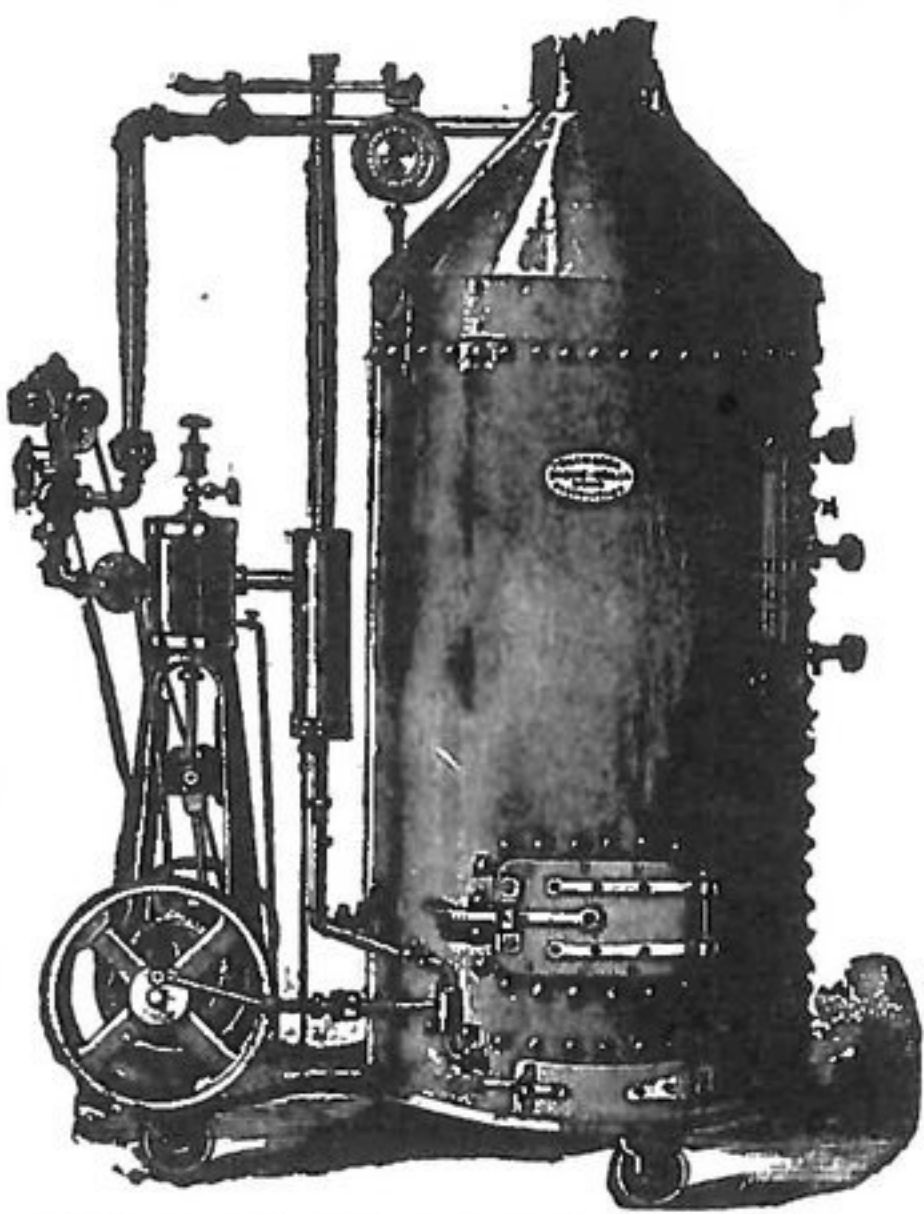
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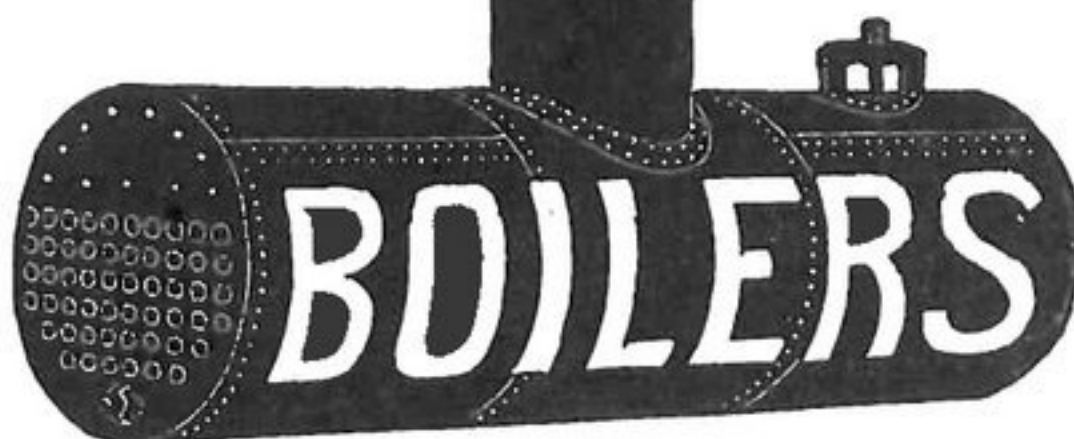
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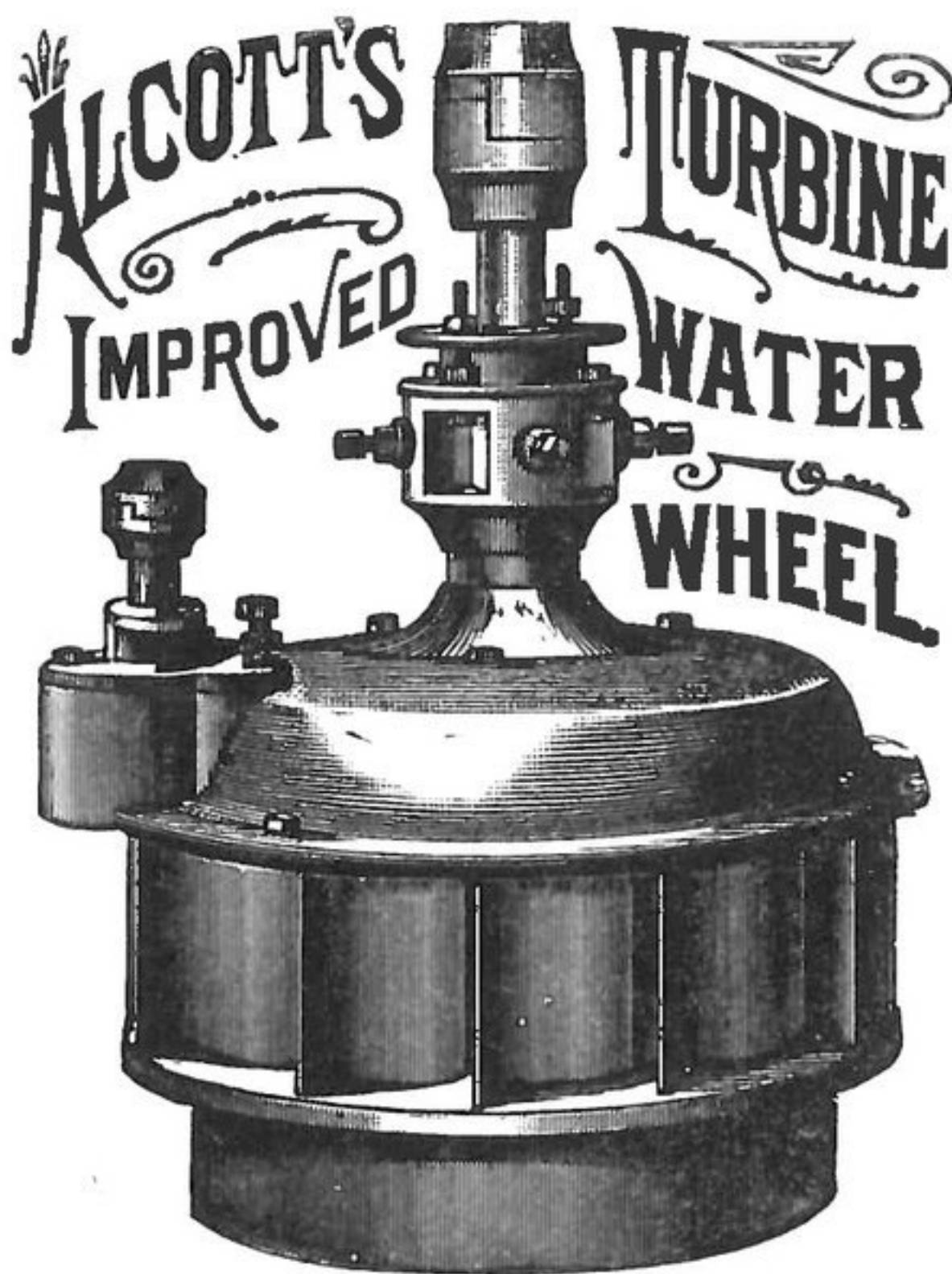
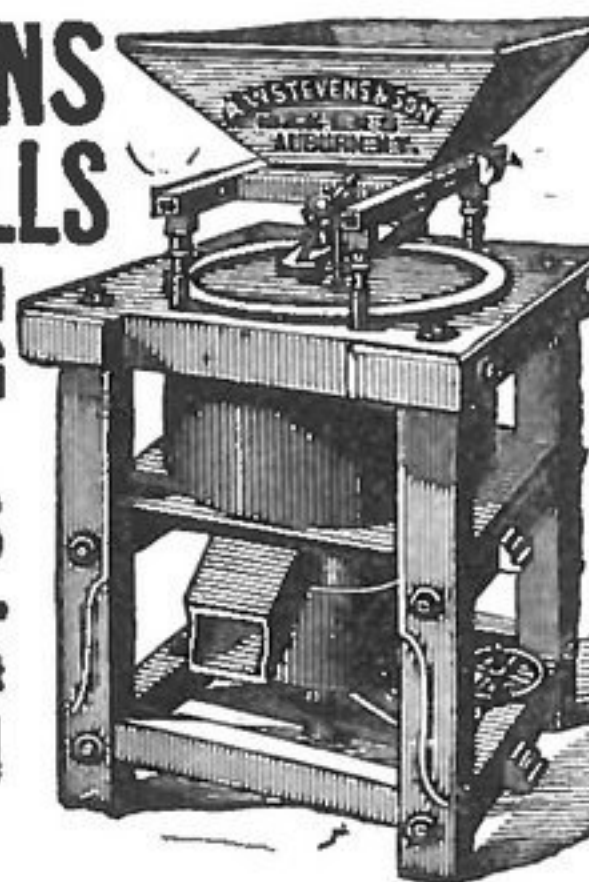
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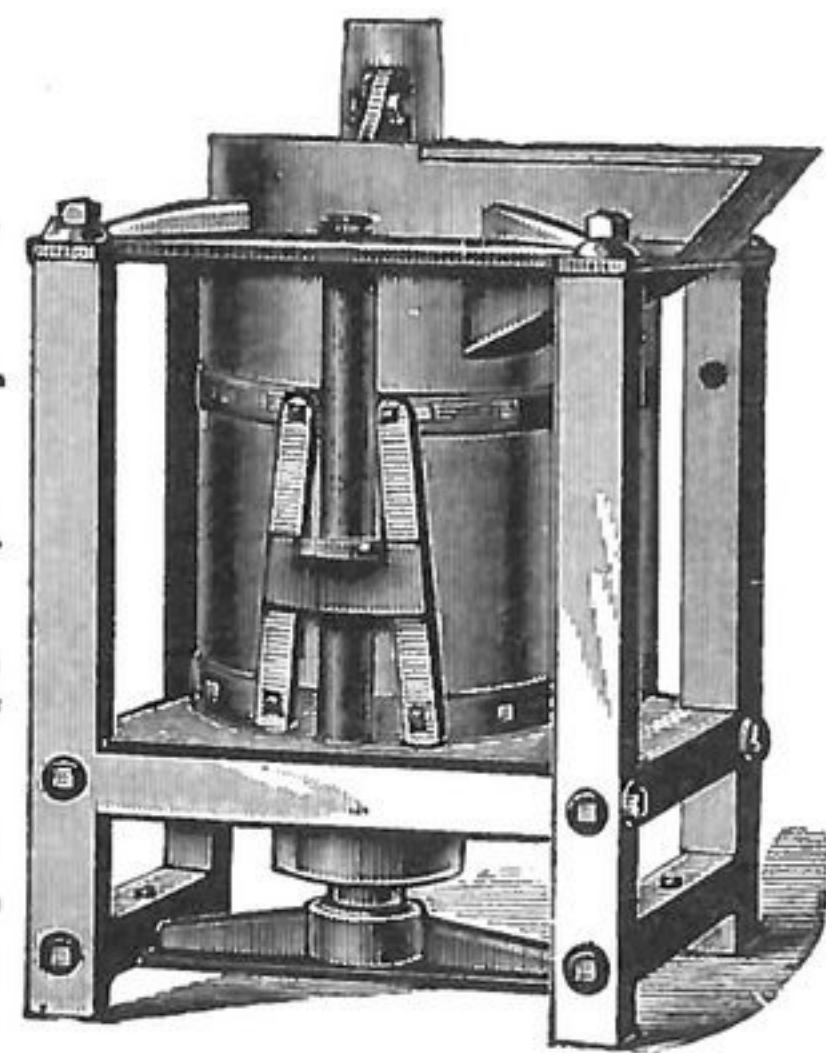
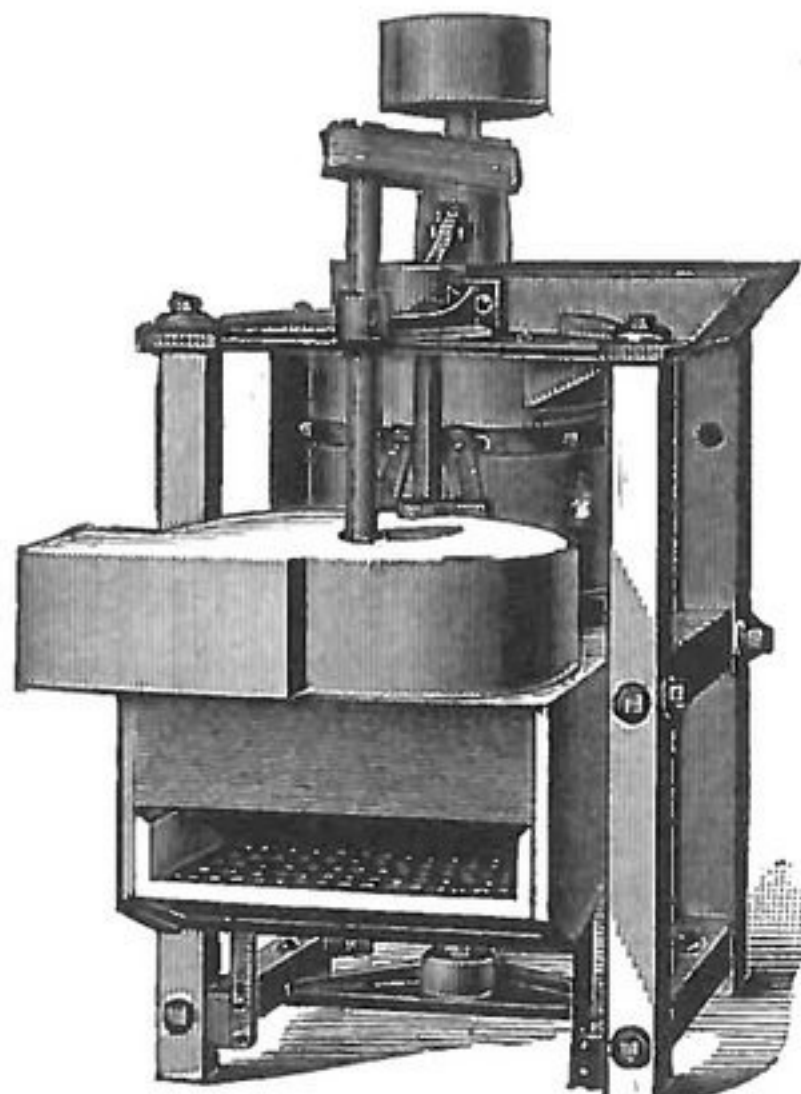
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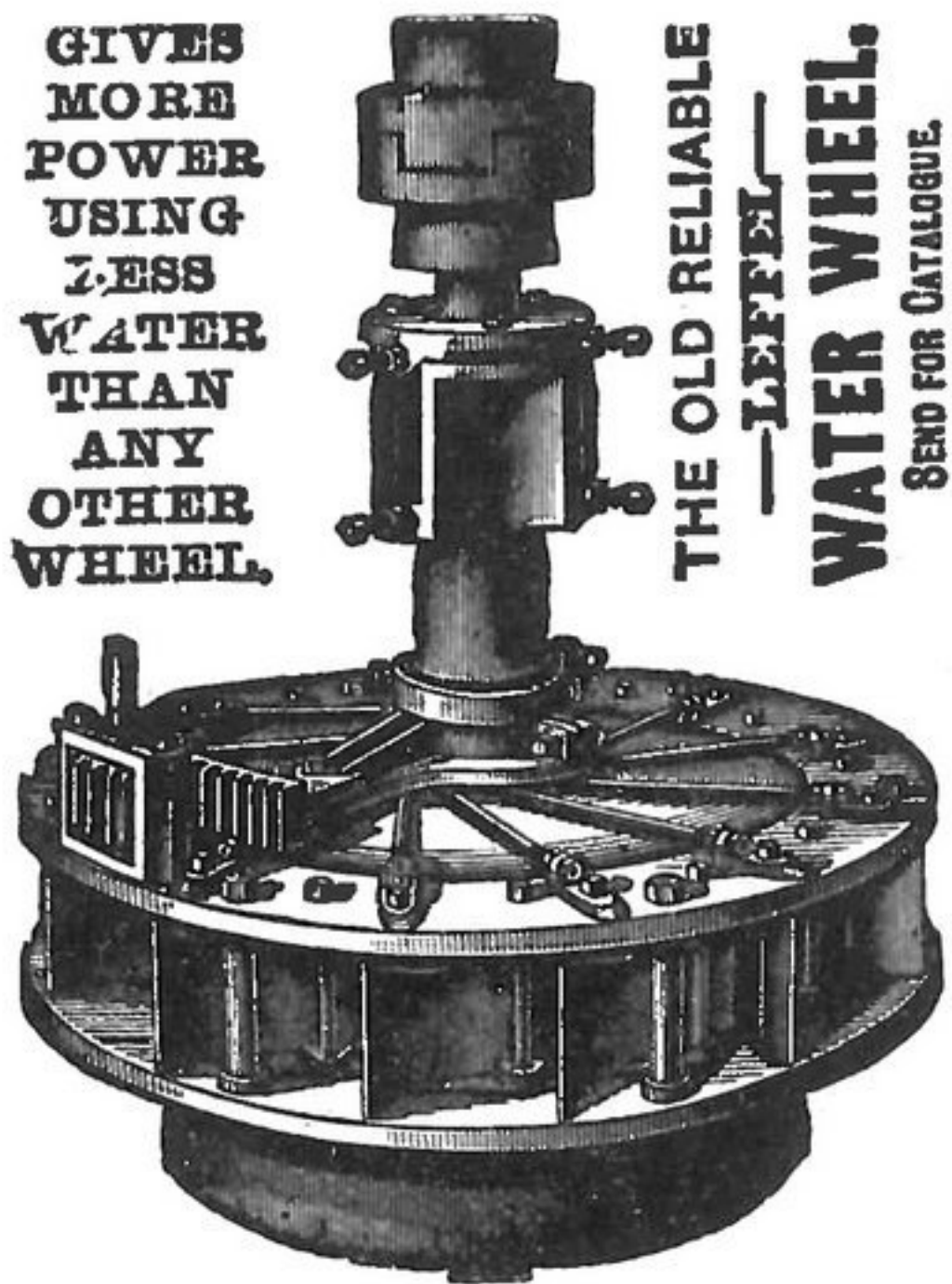
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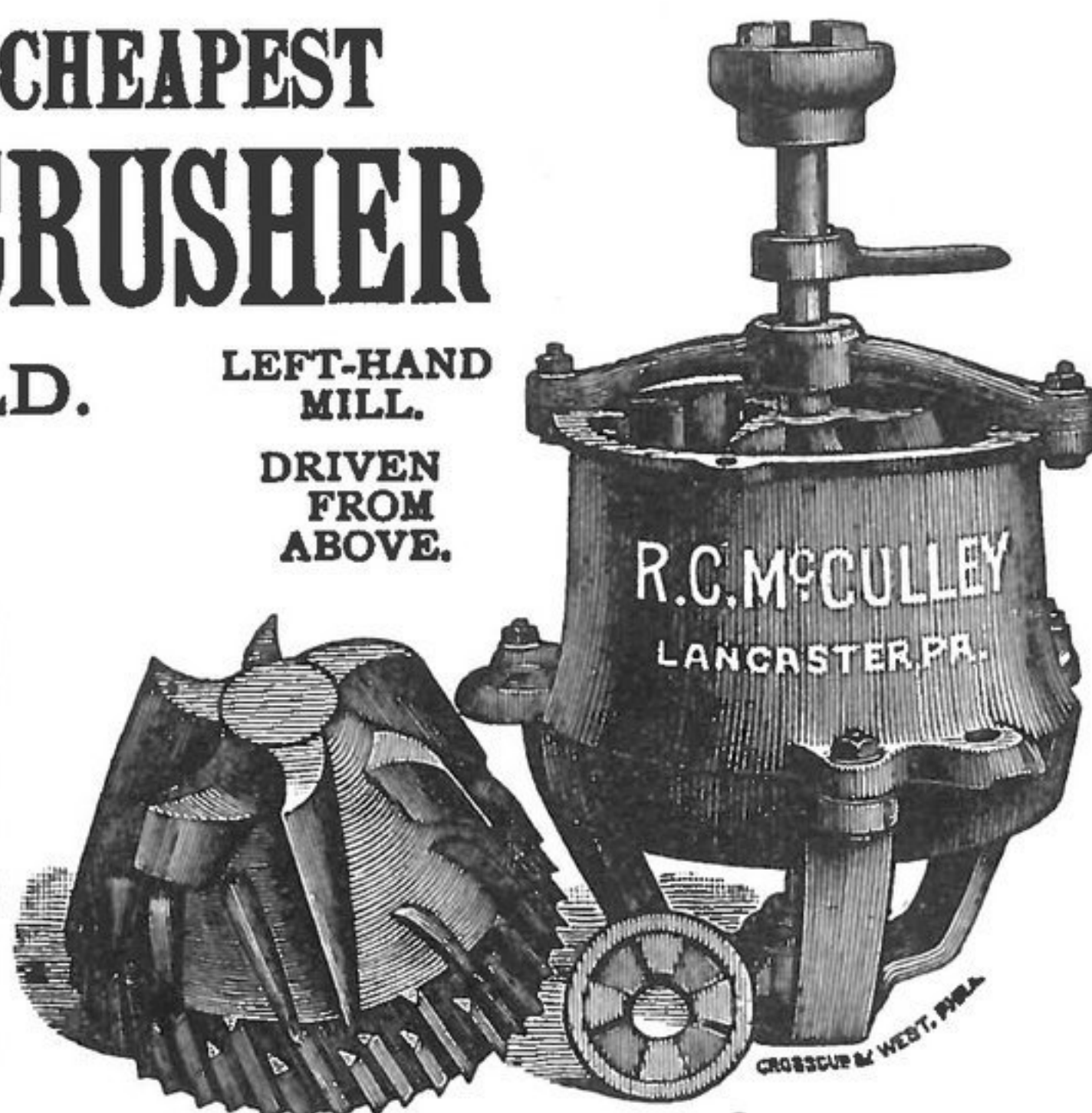
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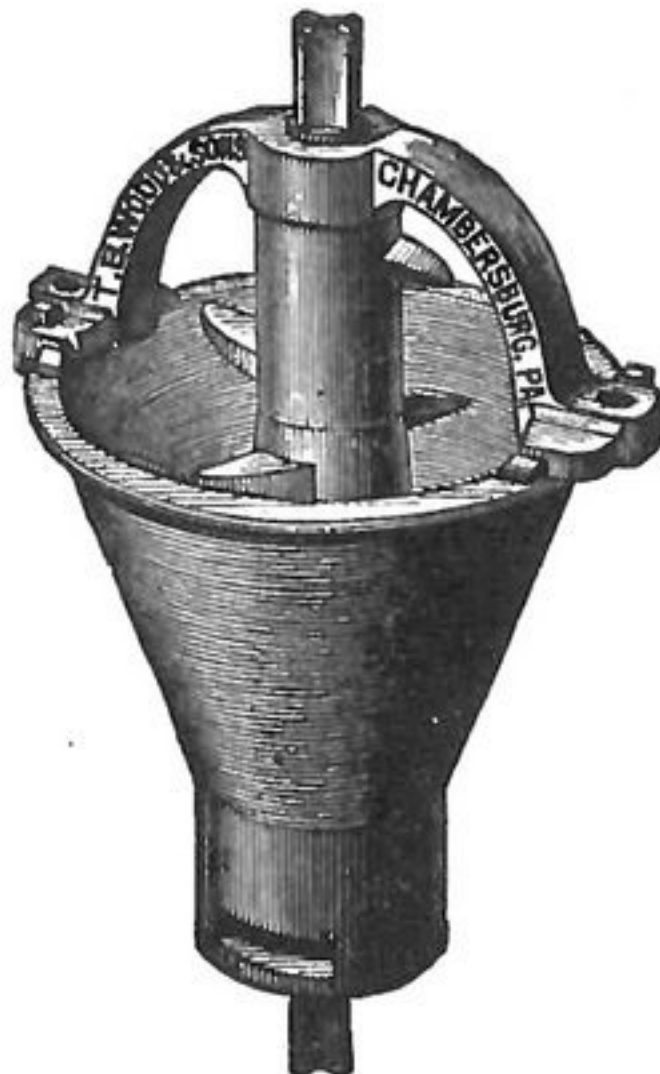


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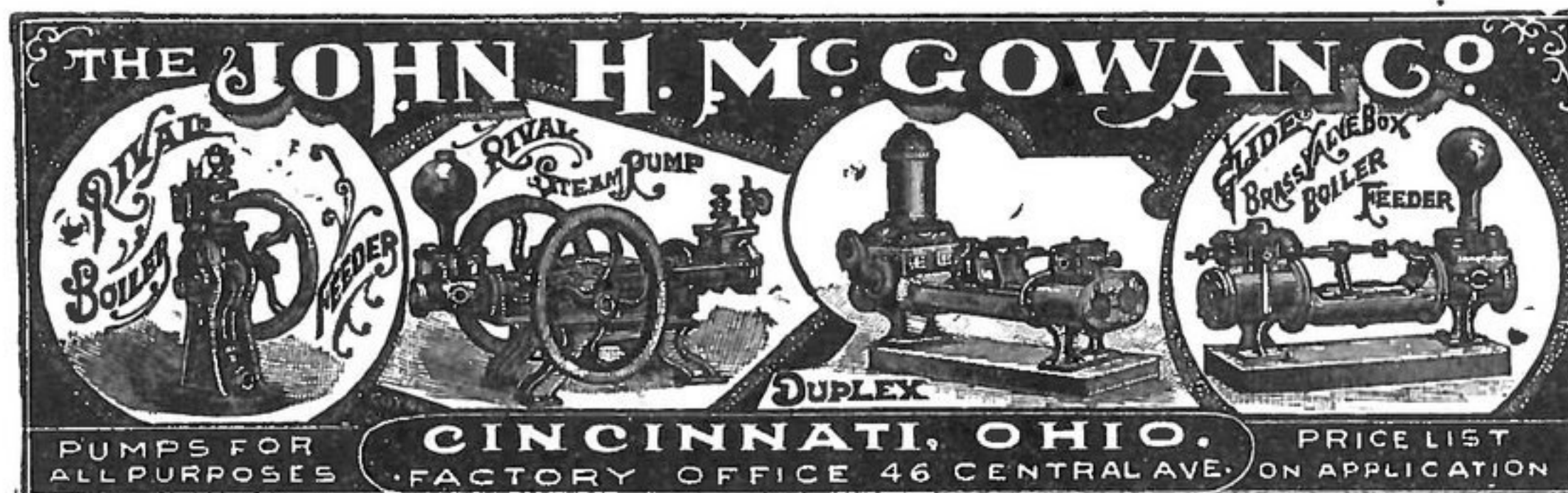
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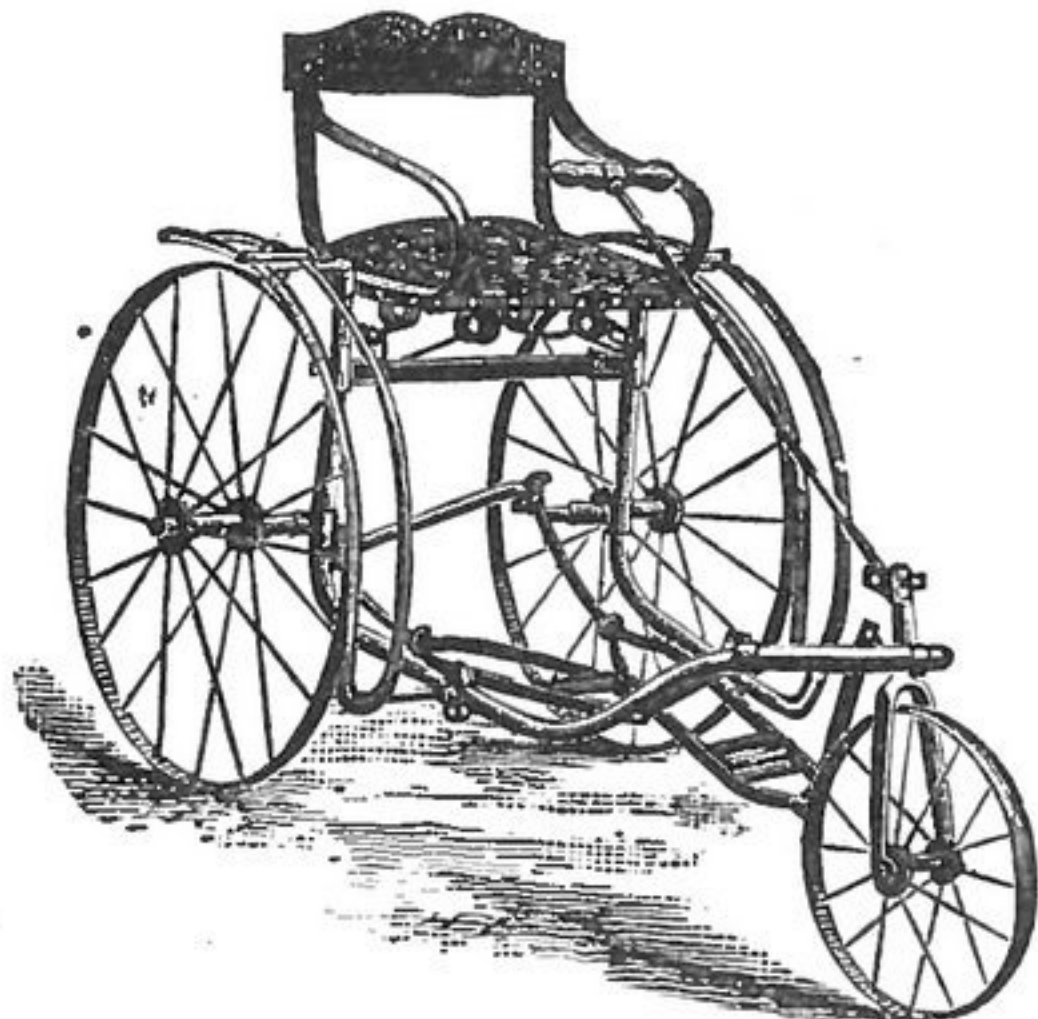
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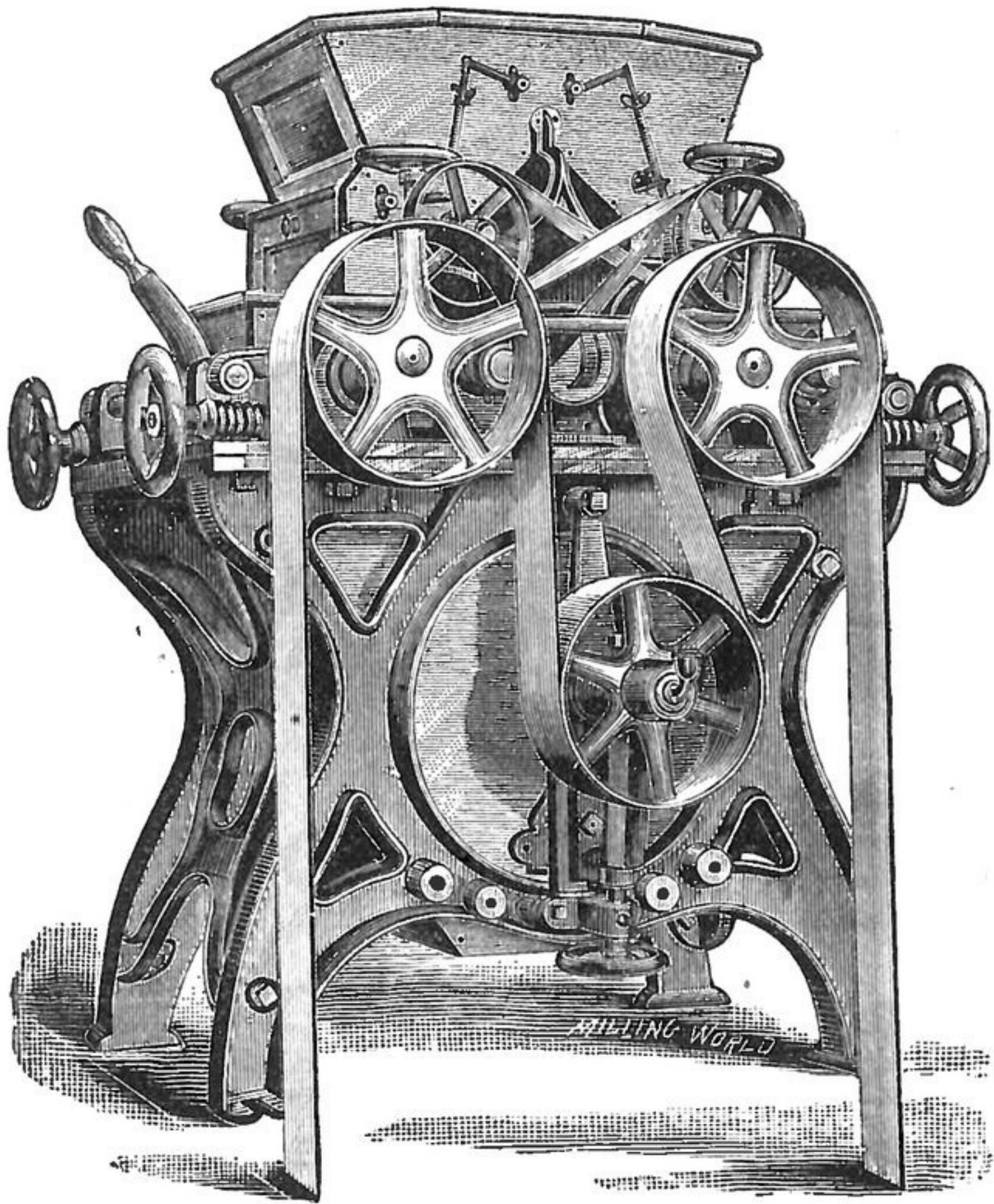
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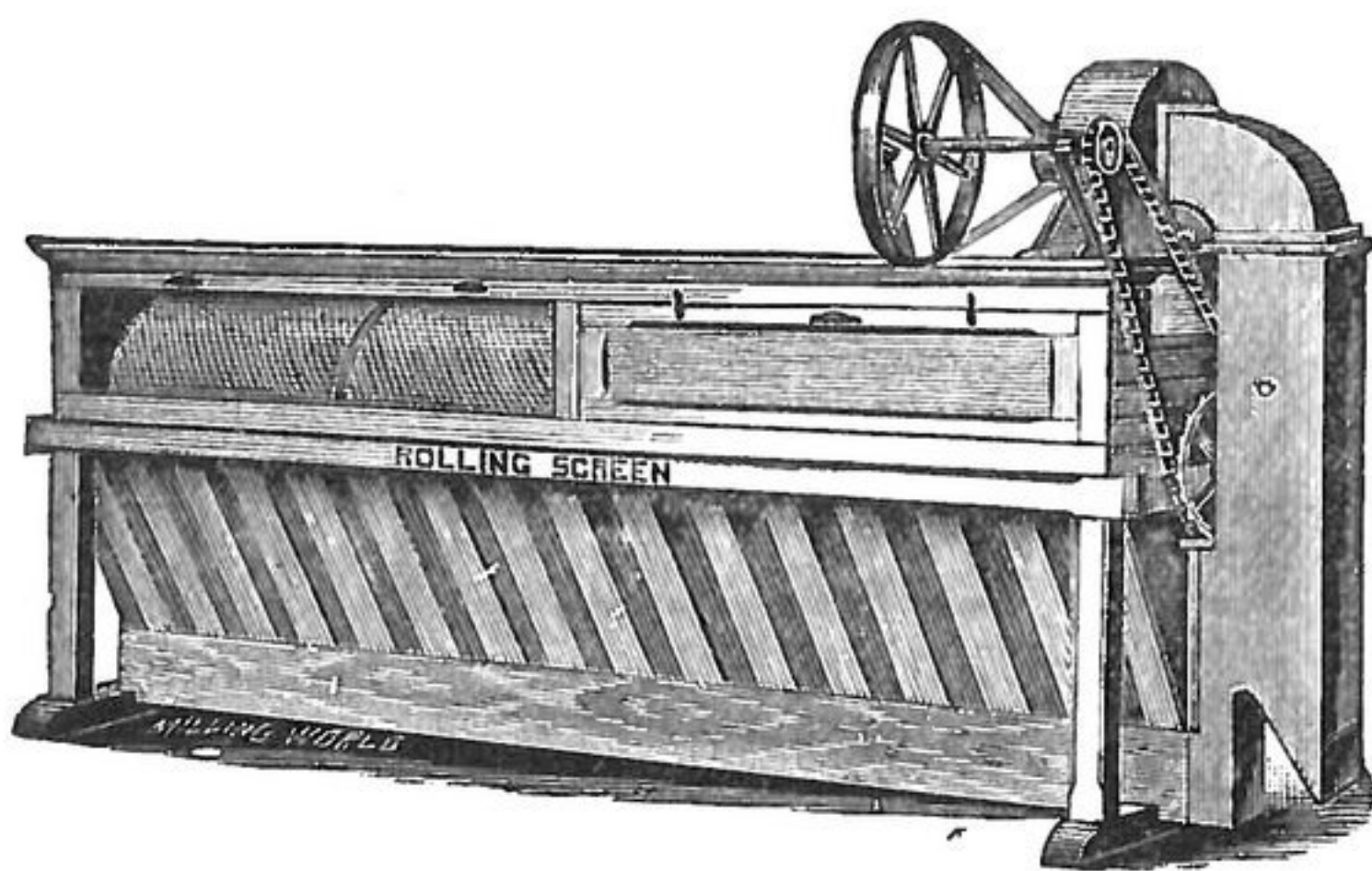
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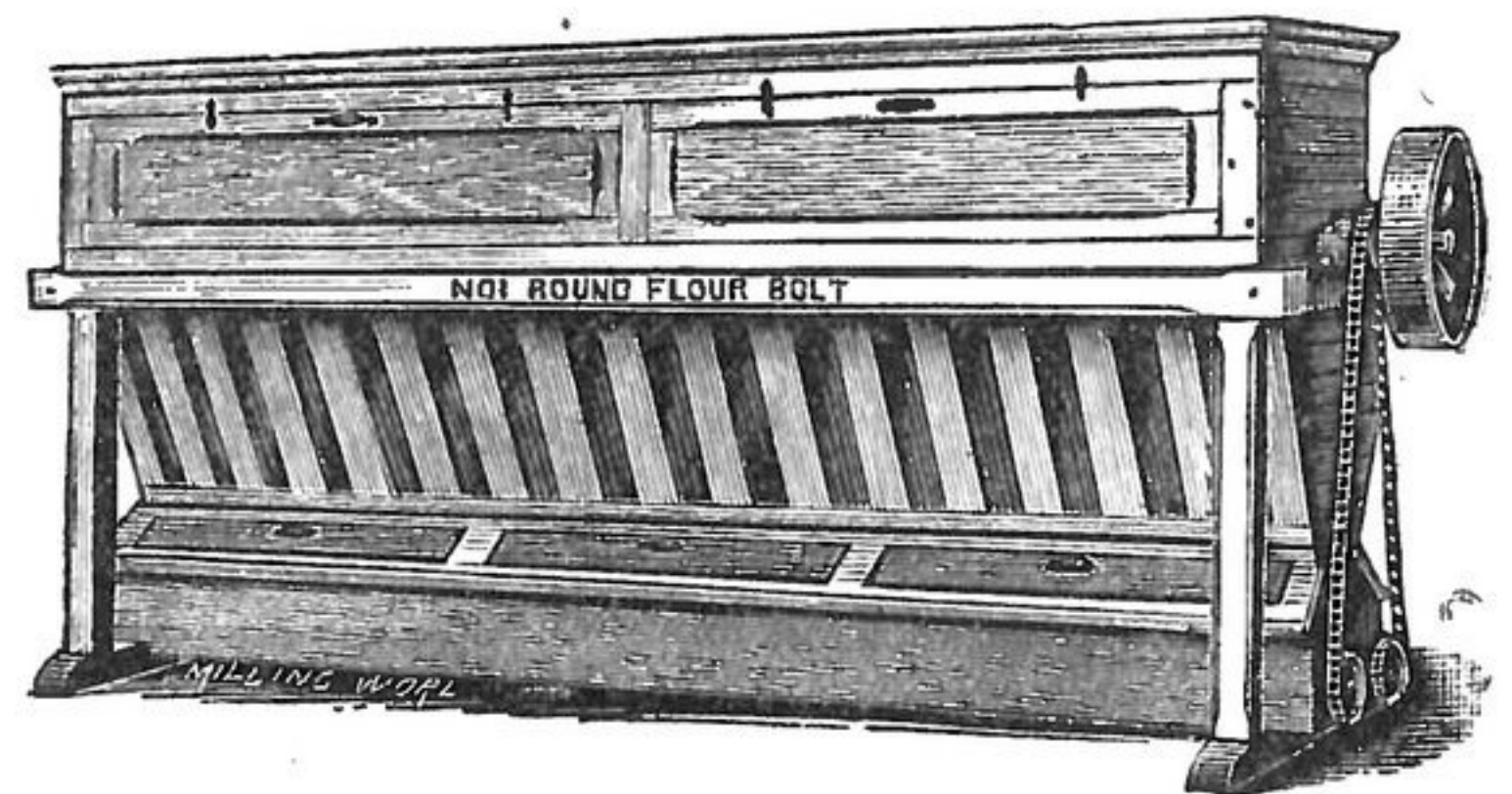
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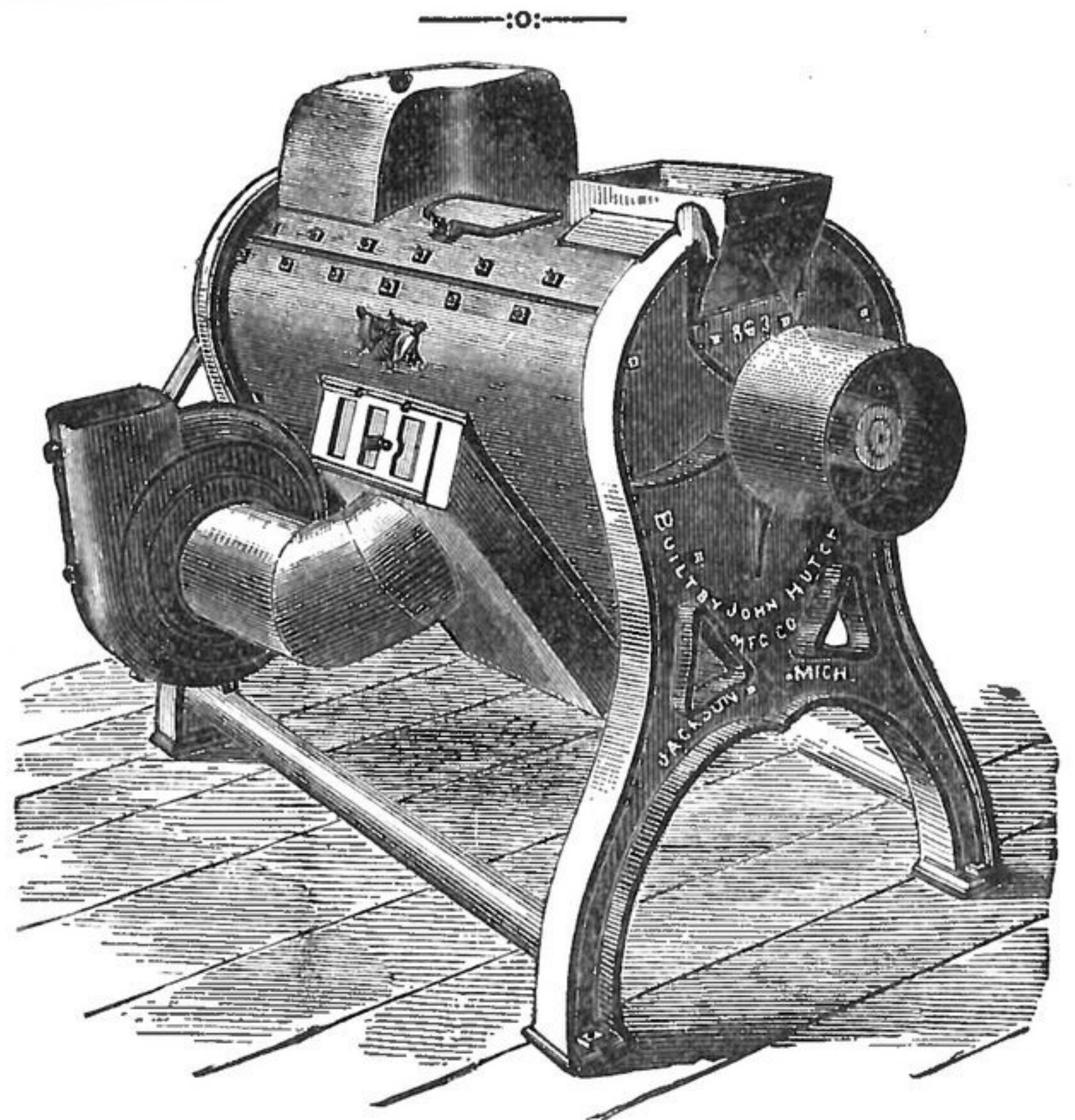


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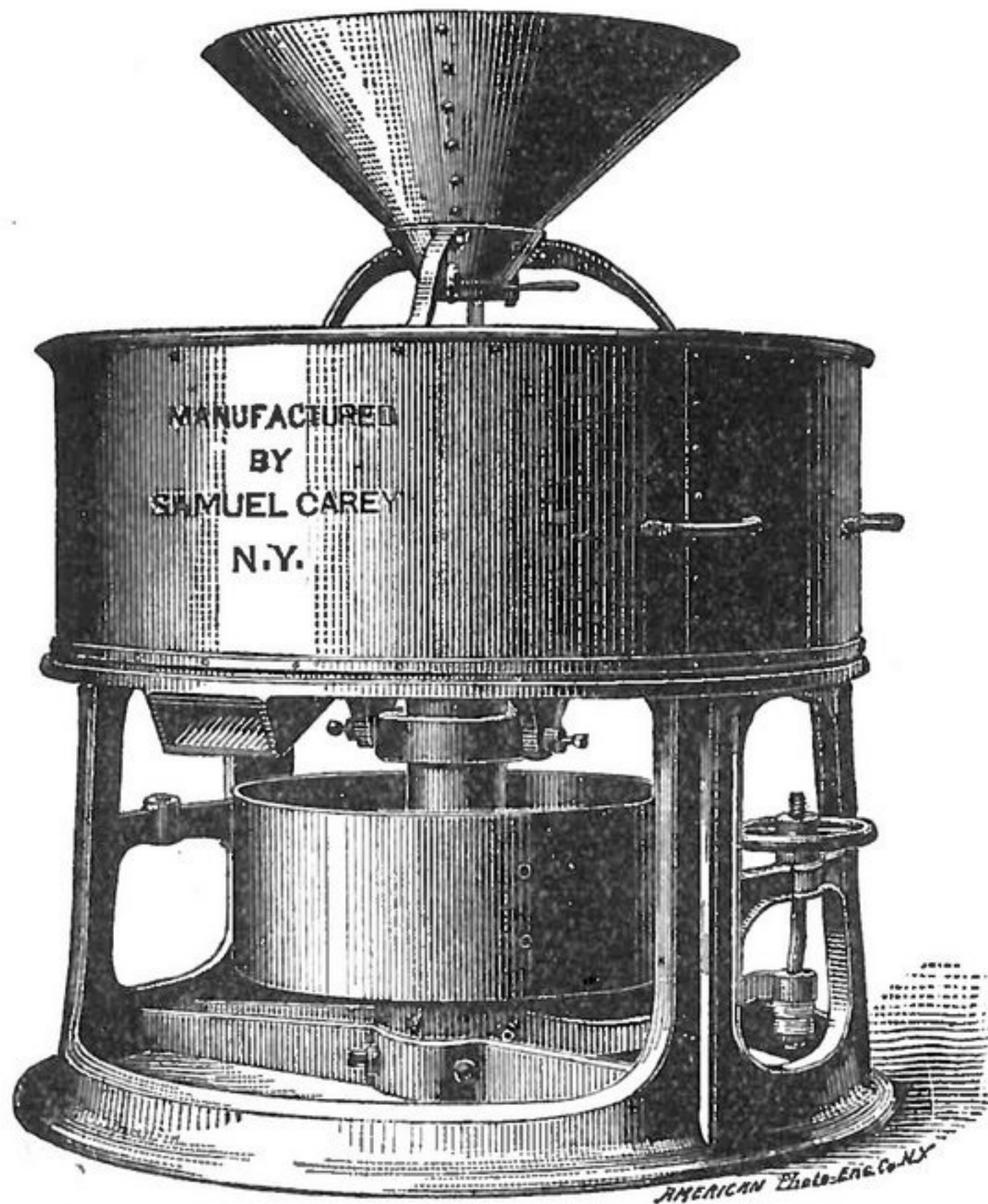
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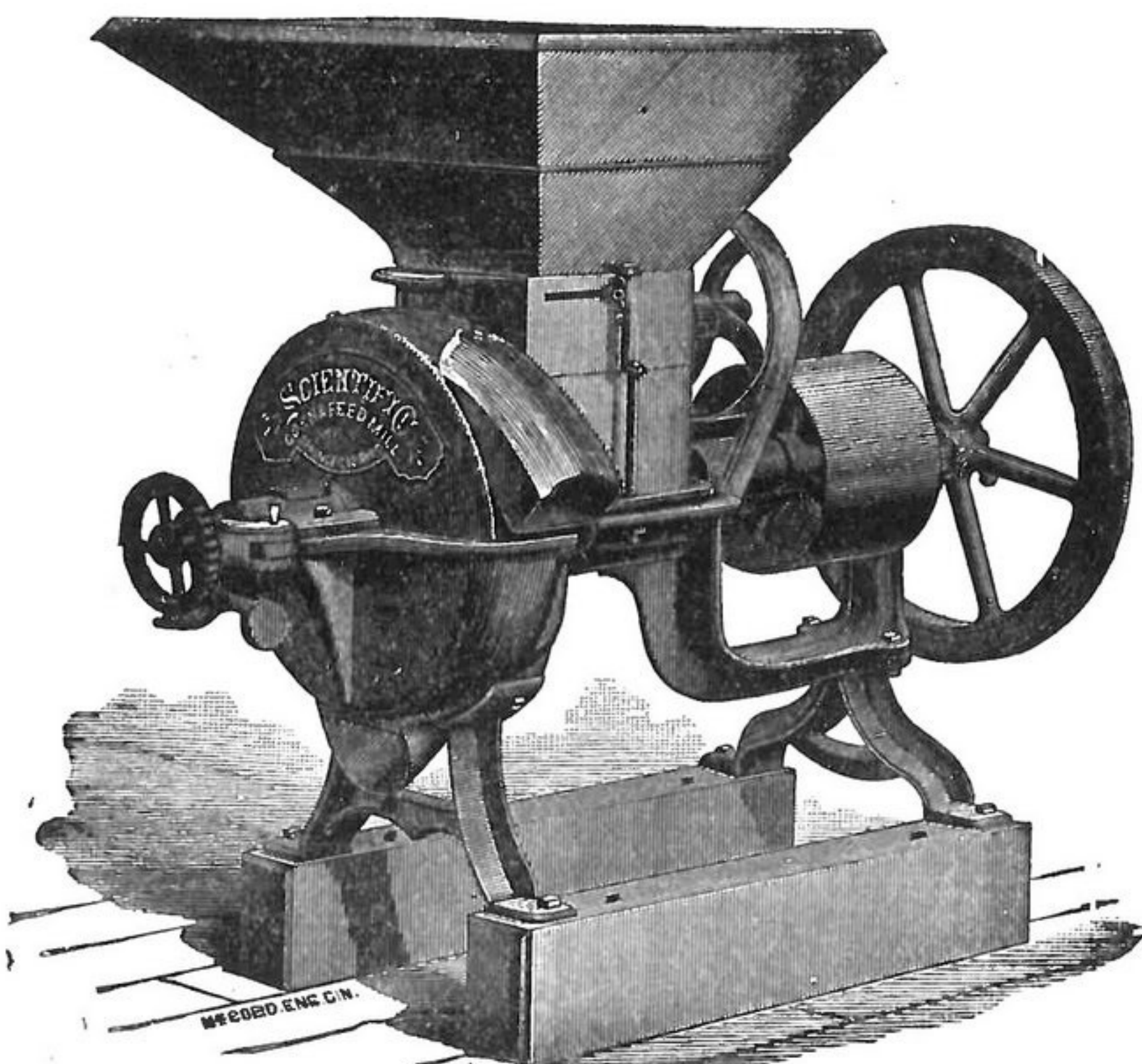
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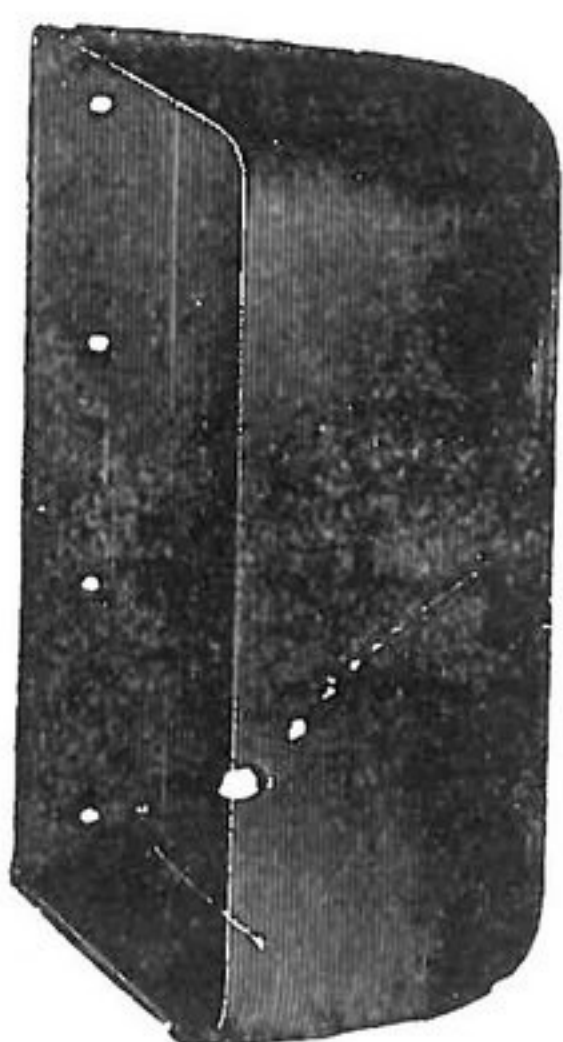
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